THE SEVEN COLONIES OF AUSTRALASIA.

AUSTRALASIA
AVERAGE RAINFALL
SHEWN THUS
UNDER 5 INCHES
5 — 10 "
10 — 20 "
20 — 30 "
30 — 40 "
40 — 50 "
50 — 60 "
60 — 70 "
ABOVE 70 INCHES
INDIAN OCEAN
SOUTHERN OCEAN
PACIFIC OCEAN
Coral Sea
Tasman Sea
Arafura Sea
Banda Sea
Timor Sea
Flores Sea
Gulf of Carpentaria
Great Australian Bight
Torres Str.
Bass Strait
Cook Str.
Cape York Penin.
Northern Territory
Dutch New Guinea
German New Guinea
British New Guinea
Kaiser Wilhelms Land
Bismarck Archipelago
Solomon Is.
New Hebrides
New Caledonia (French)
Fiji Is.
Norfolk I.
Lord Howe Is.
Kermadec Is.
Chatham Is.
Stewart I.
Banks Is.
Santa Cruz Is.
Gilbert Is.
Malayta
Guadalcanar
Bougainville
New Britain
New Ireland
Admiralty Is.
Timor Land
Celebes
Molucca Isles
Borneo
Sumbawa
Flores
Timor
Sandalwood or Sumba I.
Tasmania
Hobart
Launceston
Melbourne
Adelaide
Perth
Fremantle
Albany
Sydney & Port Jackson
Brisbane
Newcastle & Port Hunter
Port Augusta
Port Darwin
Port Essington
Roebuck Bay
Broome
Derby
Wyndham
Queenscliff
Cambridge G.
Van Diemen Gulf
Melville I.
Bathurst I.
Melville B.
Groote I.
Wessel Is.
Pellew Is.
Wellesley Is.
Sir Charles Hotham Mt.
Mt. Olga
Mt. Leichhardt
Mt. Macpherson
Mt. Wilfred
Mt. Macdonald
Mt. Daniell Range
Musgrave Range
Central Mt. Stuart
Alice Springs
Barrow Creek
Tennant Creek
Daly Waters
Wave Hill
Victoria R.
Roper R.
Limmen Bight R.
Gregory R.
Leichhardt R.
Flinders R.
Barkly Tableland
Barkly Ra.
Lake Nash
Lake Woods
Lake Amadeus
Lake Gregory
Lake Torrens
Lake Eyre
Lake Frome
Lake Gairdner
Lake Callabonna
Lake Blanche
Lake Hope
Lake Macleay
Lake Way
Lake Barlee
Lake Moore
Lake Austin
Lake Darlot
Lake Carnegie
Lake Disappointment

A

STATISTICAL ACCOUNT

OF THE

SEVEN COLONIES OF AUSTRALASIA,

1899-1900,

BY

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CONTENTS.

	Page.
Areas and Boundaries	1
Climate	5
New South Wales	11
Victoria	41
Queensland	62
South Australia	89
Western Australia	111
Tasmania	138
New Zealand...	160
Parliaments	233
Population	249
Religion	302
Defence	309
Shipping	318
Commerce	332
Social Condition	359
Education	388
Food Supply and Cost of Living	412
Land and Settlement	425
Pastoral Resources and Dairy Industry	474
Agriculture	501
Mineral Resources	552
Employment and Production	595
Local Government	616
Railways	636
Posts and Telegraphs	702
Private Finance	720
Public Finance	769

Map of Australasia ... ... *Facing Title-page.*

PREFACE.

THE general plan adopted in previous issues has been followed on the present occasion, but as this edition is published on the eve of the establishment of the Australian Commonwealth, it has been necessary to make several important changes in the arrangement of the information to accord with the new condition of things which the Commonwealth establishes. I have also thought it desirable to insert a brief historical sketch of each State and of New Zealand, and to enlarge the scope of the chapters which deal with matters now transferred to the jurisdiction of the Commonwealth.

In all cases the figures have been revised to accord with the latest information, and as a rule they refer either to the year 1899 or to the year 1900; in some instances, however, owing to the undue delay in publishing the official statistics, I have been compelled to use figures relating to 1898, but the instances where this was necessary were neither many nor important.

Care has been taken to correct errors which have escaped notice in previous editions, and to keep this edition free from them. Should any such have remained undetected, as in the multitude of references is quite possible, it would be deemed a favour if their nature and position were pointed out.

T. A. COGHLAN.

Statistician's Office,
Sydney, 17th December, 1900.

AREAS AND BOUNDARIES.

THE Australasian colonies comprise the continent of Australia, the adjacent island of Tasmania, and the islands of New Zealand. The group was formerly subdivided politically into seven colonies; but from the 1st January, 1901, it will comprise the Commonwealth of Australia, consisting of six States and the separate colony of New Zealand, the respective areas of which are as follows:—

State.	Area in acres.	Area in square miles.
New South Wales	198,848,000	310,700
Victoria	56,245,760	87,884
Queensland	427,838,080	668,497
South Australia	578,361,600	903,690
Western Australia	624,588,800	975,920
Tasmania	16,778,000	26,215
Commonwealth of Australia	1,902,660,240	2,972,906
New Zealand	66,861,440	104,471
Australasia	1,969,521,680	3,077,377

The British Empire, exclusive of territories under protectorates and spheres of influence, extends over an area of 9,093,865 square miles, so that more than one-third of its area lies within the limits of Australia and New Zealand. Australasia is more than twenty-six times as large as the United Kingdom; more than fifteen times as large as France; more than half as large again as Russia in Europe; and almost equal in extent to the continent of Europe or to the United States of America.

The mainland of Australia lies between 10° 39′ and 39° 11½′ south latitude, and the meridians of 113° 5′ and 153° 16′ east longitude. Its greatest length is 2,400 miles from east to west, and its greatest breadth, 1,971 miles from north to south. Its area may be approximately stated at 2,946,691 square miles, and its coast-line at 8,850 miles, equal to 1 mile to each 333 square miles of land—the smallest proportion of coast shown by any of the continents. Tasmania, to the south of the mainland, is separated from Victoria by Bass Straits, about 150 miles wide. New Zealand is opposite the south-eastern coast of Australia, the width of ocean intervening, known as the Tasman Sea, being about 1,100 miles.

New South Wales lies principally between the 29th and 36th parallels of south latitude, and between the 141st and 153rd meridians of east longitude. The length of the state, from Point Danger on the north to Cape Howe on the south, is 680 miles. From east to west, along the 29th parallel, the breadth is 760 miles; while diagonally, from the south-west corner—where the Murray passes into South Australia—to Point Danger, the length reaches 850 miles. The seaboard extends over 700 miles. There are no islands of importance on the coast of New South Wales. Lord Howe Island, some 400 miles north-east of Sydney, forms a portion of the colony. The Imperial Government handed over the administration of Norfolk Island to New South Wales in 1897, and in that year a Resident Magistrate was appointed as representative of the New South Wales Government.

Victoria is situated between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. The dividing line between Victoria and South Australia was fixed as the 141st meridian of east longitude, but through an error in survey the present recognised boundary falls about 1½ mile west of the 141st meridian. The mistake tells against South Australia, and the authorities of that colony have been demanding for many years a re-adjustment of territory, but there seems little prospect of a disturbance of the present arrangement. The extreme length of Victoria from east to west is 420 miles, and the breadth 250 miles. The coast-line is about 600 miles.

Queensland extends from the 11th to the 29th parallel of south latitude, and from the 138th to the 153rd meridian of east longitude. The boundary line separating the colony from South Australia extends northwards along the 141st meridian of east longitude as far as the 26th parallel of south latitude, thence along the 138th meridian of east longitude to the seaboard. This line also requires re-adjustment, the present reputed boundary being in all probability too far eastward. The greatest length from north to south is 1,300 miles, and the greatest breadth is 800 miles. The coast-line is about 2,550 miles. The coast of Queensland in some parts is studded with islands. The largest are Stradbroke and Moreton on the south-east coast; while Thursday Island, on the far north coast, is an important place of call, and has been strongly fortified as one of the lines of defence for the colonies of the eastern seaboard.

The island of New Guinea lies close to the northern extremity of Queensland, being separated from the mainland by Torres Straits. It is occupied by Dutch, English, and German colonists. The British colony of New Guinea embraces all that group of islands lying within the 141st and 155th meridians of east longitude, and the 5th and 12th parallels of south latitude. The government is vested in an Administrator and an Executive Council; and towards the expenses of government the three colonies on the eastern seaboard of Australia contribute each £5,000 annually. By an Act passed in 1887 Queensland

engaged for ten years to hold itself primarily responsible for the whole amount of this subsidy. The area of British New Guinea is estimated to be 90,000 square miles, and the native population at 350,000.

South Australia extends from the 11th to the 38th parallel of south latitude, and from the 129th to the 141st meridian of east longitude. The province of South Australia, properly so called, lies between the 38th and 26th parallels of south latitude, and the 141st and 129th meridians of east longitude; the Northern Territory is bounded by the 26th and 11th parallels of south latitude, and the 129th and 138th meridians of east longitude. The greatest length of the colony from north to south is 1,850 miles, and the greatest breadth is 650 miles, with a seaboard of 2,000 miles, of which about 900 miles are washed by the Indian Ocean, the Arafura Sea, and the waters of the Gulf of Carpentaria. The most important islands belonging to the colony are Kangaroo Island on the south coast, 85 miles long and 30 broad; Melville Island, off Port Darwin, on the northern coast; Bathurst Island, separated from the last-mentioned by Apsley Straits; and Groote Eyland, in the Gulf of Carpentaria. A stockade was erected by Captain Bremer on Melville Island in 1824, but was abandoned in 1829.

Western Australia consists of the country between the 14th and 35th parallels of south latitude, and the 113th and 129th meridians of east longitude. The greatest length north and south is 1,450 miles, and the greatest breadth from east to west is 850 miles. The coast-line is about 3,000 miles.

Tasmania is an island situated about 150 miles south of Victoria, from which it is separated by Bass Straits. It lies between 40° 33′ and 43° 39′ south latitude, and the meridians of 144° 39′ and 148° 23′ east longitude. Its greatest length from north to south is 210 miles, and its greatest breadth from east to west is 200 miles. There are several small islands which belong to the colony. Flinders' Island, in Bass Straits, has an area of 513,000 acres; and King's Island, the chief of the north-west group, contains 272,000 acres. Including the adjacent islands, the area of Tasmania is 26,215 square miles.

New Zealand lies to the east of Australia, its nearest point to the mainland being Cape Maria van Diemen, which is about 1,100 miles from Sugarloaf Point, in New South Wales. New Zealand and its dependencies lie between the 33rd and 53rd parallels of south latitude, and between 166° 30′ east longitude and 173° west longitude. The waters known as the Tasman Sea separate the colony from the continent of Australia.

The North Island, or New Ulster, has a length of about 515 miles, by a breadth of about 250 miles. Its area is estimated at 44,467 square miles, and its coast-line at 2,200 miles. Wellington, the seat of Government, is at the southern extremity of this island. The South or, as it is officially called, the Middle Island or New Munster, has a length of about 525 miles by a breadth of about 180 miles. Its area is 58,525 square miles, and its coast-line measures 2,000 miles. Stewart

Island, or New Leinster, lies off the southern extremity of South Island, and has an area of 665 square miles; its greatest length is 30 miles by a breadth of 25 miles.

In 1887 a proclamation was made declaring the Kermadec Islands, lying between the 29th and 32nd parallels of south latitude, and the 177th and 180th meridians of west longitude, part of the colony of New Zealand. A protectorate is exercised by the Imperial Government over the Cook Islands or Hervey Group. The British Resident is appointed on the recommendation of the New Zealand Government, which also defrays the cost of administration.

Including the Chatham Islands, the Auckland Islands, the Campbell Islands, the Bounty Islands, and many others which are dependent, the total area of the colony of New Zealand is estimated at 104,471 square miles.

CLIMATE.

THE Tropic of Capricorn divides Australia into two parts. Of these, the northern or inter-tropical portion contains 1,145,000 square miles, comprising half of Queensland, the Northern Territory of South Australia, and the north-western divisions of Western Australia. The whole of New South Wales, Victoria, New Zealand, Tasmania, and South Australia proper, half of Queensland, and more than half of Western Australia, comprising 1,932,000 square miles, are without the tropics. In a region so extensive, very great varieties of climate are naturally to be expected, but it may be stated as a general law that the climate of Australasia is milder than that of corresponding lands in the Northern Hemisphere. During July, which is the coldest month in southern latitudes, one half of Australasia has a mean temperature ranging from 40° to 64°, and the other half from 64° to 80°. The following are the areas subject to the various average temperatures during the month referred to :—

Temperature, Fahr.	Area in sq. miles.
35° — 40°	300
40° — 45°	39,700
45° — 50°	88,000
50° — 55°	617,800
55° — 60°	681,800
60° — 65°	834,400
65° — 70°	515,000
70° — 75°	275,900
75° — 80°	24,500

The temperature during December ranges from 50° to above 95° Fahr., half of Australasia having a mean temperature below 83°. Dividing the land into zones of average summer temperature, the following are the areas which would fall to each :—

Temperature, Fahr.	Area in sq. miles.
50° — 55°	300
55° — 60°	66,300
60° — 65°	111,300
65° — 70°	74,300
70° — 75°	362,300
75° — 80°	439,200
80° — 85°	733,600
85° — 90°	570,600
90° — 95°	584,100
95° and over	135,400

Judging from the figures just given, it must be conceded that a considerable area of the continent is not adapted for colonisation by European races. The region with a mean summer temperature in excess of 95° Fahr. is the interior of the Northern Territory of South Australia north of

the 20th parallel; and the whole of the country, excepting the seaboard, lying between the meridians of 120° and 140° and north of the 25th parallel, has a mean temperature in excess of 90° Fahr.

Climatically, as well as geographically, New South Wales is divided into three marked divisions. The coastal region, which lies between the parallels of 28° and 37° south latitude, has an average summer temperature ranging from 78° in the north to 67° in the south, with a winter temperature of from 59° to 52°. Taking the district generally, the difference between the mean summer and mean winter temperature may be set down as averaging not more than 20°, a range smaller than is found in most other parts of the world. The famed resorts on the Mediterranean seaboard bear no comparison with the Pacific slopes of New South Wales, either for natural salubrity or for the comparative mildness of the summer and winter.

Sydney, situated as it is midway between the extreme points of the colony, in latitude 33° 51′ S., has a mean temperature of 62·9°, corresponding with that of Barcelona, the great maritime city of Spain, and of Toulon, in France; the former being in latitude 41° 22′ N., and the latter in 43° 7′ N. At Sydney the mean summer temperature is 71°, and that of winter 54°. The range is thus 17° Fahr. At Naples, where the mean temperature for the year is about the same as at Sydney, the summer temperature reaches a mean of 74·4°, and the mean of winter is 47·6°, with a range of 26·8°. Thus the summer is warmer, and the winter much colder, than at Sydney. The highest temperature in the shade experienced in Sydney was 108·5°, and the lowest winter temperature 35·9°, giving a range of 72·6°. At Naples the range has been as great as 81°, the winter minimum falling sometimes below the freezing-point. The mean temperature of Sydney for a long series of years was—spring 62°, summer 71°, autumn 64°, and winter 54°.

Passing from the coast to the table-land, a distinct climatic region is entered. Cooma, with a mean summer temperature of 65·4° and a mean winter temperature of 41·4°, may be taken as illustrative of the climate of the southern table-land, and Armidale of the northern. The first-named town stands in the centre of the Monaro plains, at an elevation of 2,637 feet above sea-level, and enjoys a summer as mild as either London or Paris, while its winters are far less severe. On the New England table-land, the climate of Armidale and other towns may be considered as nearly perfect as can be found. The yearly average temperature is scarcely 56·5°, while the summer only reaches 67·7°, and the winter falls to 44·4°, a range of temperature approximating closely to that of the famous health-resorts in the south of France.

The climatic conditions of the western districts of the colony are entirely different from those of the other two regions, and have often been cited as disagreeable. Compared with the equable temperature of the coastal district or of the table-land, there may appear some justification for such a reputation, but only by comparison. The climate of the great plains, in spite of the heat of part of the summer, is very

healthy. The town of Bourke may be taken as an example. Seated in the midst of the great plain of the interior, it illustrates peculiarly well the defects as well as the excellences of the climate of the whole region. Bourke has exactly the same latitude as Cairo, yet its mean summer temperature is 1·3° less, and its mean annual temperature 4° less than that of the Egyptian city. New Orleans also lies on the same parallel, but the American city is 4° hotter in summer. As regards winter temperature, Bourke leaves little to be desired. The mean winter reading of the thermometer is 54·7°, and accompanied as this is by clear skies and an absence of snow, the season is both refreshing and enjoyable.

The rainfall of New South Wales ranges from an annual average of 64 inches at Port Macquarie, on the northern coast, and Kiandra, in the Monaro district, to 11 inches at Wilcannia, in the Trans-Darling country. The coastal districts average about 50 inches of rain per annum; on the table-land the mean rainfall is 30 inches, but in the western interior it is as low as 18 inches. The average rainfall of Sydney during forty years was 49·5 inches, while during 1899 a fall of 55·8 inches was recorded.

The climate of Victoria does not differ greatly from that of New South Wales; the heat, however, is generally less intense in summer and the cold greater in winter. Melbourne, which stands in latitude 37° 50′ S., has a mean temperature of 57·3°, and therefore corresponds with Bathurst in New South Wales, Washington in the United States, Madrid, Lisbon, and Messina. The difference between summer and winter is, however, less at Melbourne than at any of the places mentioned. The mean temperature is 6° less than that of Sydney and 7° less than that of Adelaide—the result of a long series of observations being :—Spring, 57°; summer, 65·3°; autumn, 58·7°; winter, 49·2°. The highest recorded temperature in the shade at Melbourne was 110·7°, and the lowest, 27°.

Ballarat, the second city of Victoria, about 100 miles west from Melbourne, and situated at a height of about 1,400 feet above sea-level, has a minimum temperature of 29°, and a maximum of 104·5°, the average yearly mean being 54·1°. Bendigo, which is about 100 miles north of Melbourne, and 700 feet above the level of the sea, has a rather higher average temperature, ranging from a minimum of 31·2° to a maximum of 106·4°, the average yearly mean being 59·4°. At Wilson's Promontory, the most southerly point of Australia, the minimum heat is 38·6°, and the maximum 96·4°, the average yearly mean being 56·7°.

During the year 1899 the rainfall at Melbourne amounted to 28·87 inches, the highest total during the last ten years, while for a long series of years it averaged 25·58 inches, with an average of 131 days during the year on which rain fell. At Echuca, during 1899, 14·33 inches fell, and 31·34 at Portland. At Wilson's Promontory the rainfall was 42·63 inches.

As about one-half of the colony of Queensland lies within the tropics, it is but natural to expect that the climate should be very warm. The temperature, however, has a daily range less than that of other countries under the same isothermal lines. This circumstance is due to the sea-breezes, which blow with great regularity and temper what would otherwise be an excessive heat. The hot winds which prevail during the summer in some of the other colonies are unknown in Queensland. Of course, in a territory of such large extent there are many varieties of climate, and the heat is greater along the coast than on the elevated lands of the interior. In the northern parts of the colony the high temperature is very trying to persons of European descent.

The mean temperature at Brisbane, during December, January, and February, is about 76°, while during the months of June, July, and August it averages about 60°. Brisbane, however, is situated near the extreme southern end of the colony, and its average temperature is considerably less than that of many of the towns farther north. Thus the winter in Rockhampton averages nearly 65°, while the summer heat rises almost to 85°; and at Townsville and Normanton the average temperature is still higher.

The average rainfall of Queensland is high, especially along the northern coast, where it ranges from 60 to 70 inches per annum. At Brisbane 50·01 inches is the average of thirty-five years, and even on the plains of the interior from 20 to 30 inches usually fall every year. During 1898, 60·06 inches of rain fell in Brisbane, the number of wet days being 131.

South Australia, extending as it does over about 26 degrees of latitude, naturally presents considerable variations of climate. The southern portions have a climate greatly resembling that of the coast of Italy. The coldest months are June, July, and August, during which the temperature is very agreeable, averaging for a series of years 53·6°, 51·7°, and 54° for those months respectively. On the plains slight frosts occasionally occur, and ice is sometimes seen on the highlands. The summer is the only really disagreeable portion of the year. The sun at that season has great power, and the temperature frequently reaches 100° in the shade, with hot winds blowing from the interior. The weather on the whole is remarkably dry. At Adelaide there are on an average 120 rainy days per annum; during the last sixty years the mean rainfall has been 20·88 inches per annum, while farther north the quantity recorded was considerably less. The country is naturally very healthful, and in evidence of this it may be mentioned that no great epidemic has ever visited the colony.

The climate of the Northern Territory of South Australia is extremely hot, except on the elevated table-lands. Altogether, the temperature of this part of the colony is very similar to that of Northern Queensland, and the climate is equally unfavourable to Europeans. It is a fact worthy of notice that the malarial fevers which are so troublesome to the pioneers of the northern parts of Australia almost, and in some cases

entirely, disappear after the land has been settled and consolidated by stock. The rainfall in the extreme north, especially in January and February, is exceedingly heavy. The average yearly rainfall in the coast districts is about 63 inches.

Western Australia has practically only two seasons—the winter, or wet season, which commences in April and ends in October; and the summer, or dry season, which comprises the remainder of the year. During the wet season frequent and heavy rains fall, and thunderstorms with sharp showers occur in the summer. The extremes of drought and flood experienced in the other colonies are almost unknown in Western Australia, but during the summer months the north-west coast is sometimes visited by hurricanes of great violence. In the southern and early-settled parts of the colony the mean temperature is about 64°; but in the more northern portions the heat is excessive, though the dryness of the atmosphere makes it preferable to most tropical climates. At Perth, in 1898, the mean temperature was 65·5°, the maximum being 106·9° and the minimum 37·4°; and the rainfall for the same year was 32·04 inches, rain having fallen on 109 days. Observations extending over a period of twenty-two years show the average rainfall at Perth as 33 inches. Although the heat is very great during three months of the year, the nights and mornings are almost always cool, and camping out is not attended with danger owing to there being so little moisture in the air.

Tasmania, protected as it is by its geographical position and by the tempering influence of the surrounding ocean from extremes of heat or cold, enjoys an exceedingly genial climate. The greater part of the island in the settled regions is characterised by a mild and equable temperature, ranging between the extremes of 20° to 44° in winter and 78° to 96° in summer. Spring and autumn are the most pleasant seasons of the year, especially the latter, when the mean reading of the thermometer is about 57°. The mean temperature of Hobart for the last fifty years has been 55°. The richness of its flora is an evidence of the genial nature of the climate of the colony, while the purity of its atmosphere is proved by the small proportion of zymotic diseases recorded in the bills of mortality. The hot winds of the continent of Australia are felt in the northern parts of the island only, and even there they are greatly reduced in temperature by their passage across Bass Straits. Generally speaking, all through the summer months there are alternate land and sea breezes which tend to cool the atmosphere even in the hottest days. The climate is fresh and invigorating, and is much recommended as a restorative for those whose constitutions have been enfeebled by residence in hotter climes. Large numbers of tourists in search of health visit the island every summer. The rainfall, except in the mountain districts, is moderate and regular. The average downfall at Hobart for a long series of years was 25·10 inches, with 167 wet days per annum. In 1898 rain fell on 164 days, the total recorded for the year being 20·40 inches.

The climate of New Zealand is in some respects similar to that of Tasmania, but the changes of weather and temperature are often very

sudden. As the colony extends over more than 10 degrees of latitude, its climate is very varied. That of the North Island is somewhat similar to the climate of Rome, Montpellier, and Milan; while the Middle or Southern Island more resembles Jersey, in the Channel Islands. The mean annual temperature of the North Island is 57°, and of the Middle Island 52°, while the yearly average of the whole colony for each season is as follows:—Spring, 55°; summer, 63°; autumn, 57°; and winter, 48°. The mean temperature of New Zealand is lower than that of similar latitudes in Europe, though higher than is experienced in America on corresponding parallels. The mean temperature of the South or Middle Island is less by about 5° than that of the North Island. Snow very seldom lies on the ground at the sea-level in the North Island, and only occasionally in the South Island. The summits of Ruapehu, the highest mountain in the North Island, and of the great mountain chain in the South Island, are covered with perpetual snow from an altitude of 7,500 feet above the level of the sea. Ice is occasionally seen in winter-time in all parts of New Zealand. The whole colony is subject to strong breezes, which frequently culminate in gales. The rainfall during 1898 varied very much at the several observing stations. At Auckland it amounted to 40·75 inches, while at Wellington there was a fall of 41·96 inches. At Rotorua, in the North Island, 49·98 inches fell during the year, and at New Plymouth, on the west coast, 49·06 inches were recorded. At Dunedin, on the east coast of the Middle Island, the rainfall amounted to 34·14 inches, while at Hokitika, on the west coast, no less than 124 inches fell during the year. Periods of lasting drought are almost unknown in the colony; indeed, it is very seldom that the records of any station show the lapse of a whole month without rain. The number of days in the year on which rain fell varied from 101 at Lincoln to 204 at the Chatham Islands.

The following table shows the distribution of rainfall area in Australasia:—

Rainfall.	Rainfall area in square miles.			
	Australia.	Tasmania.	New Zealand.	Australasia.
Under 10 inches ...	1,219,600	.....	.....	1,219,600
10 to 20 ,, ...	843,100	9,440	.....	852,540
20 to 30 ,, ...	399,900	.....	69,650	469,550
30 to 40 ,, ...	225,700	8,380	17,410	251,490
40 to 50 ,, ...	140,300	8,380	17,410	166,090
50 to 60 ,, ...	47,900	.....	.....	47,900
60 to 70 ,, ...	56,100	.....	.....	56,100
Above 70 ,, ...	14,100	.....	.....	14,100
Total.....	2,946,700	26,200	104,470	3,077,370

ERRATUM.

On page 11, line 22, instead of 19 *read* 192.

NEW SOUTH WALES.

ALTHOUGH the existence of the "Great Southern Continent" had been proved by previous explorers of various nationalities many years before Captain Cook re-discovered the Eastern coast in 1770, it was not until the return of this navigator from his famous cruise in the "Endeavour" that the attention of the British Government was directed towards the possibility of founding a settlement in the new land. The loss of the North American colonies by their successful rebellion made it an imperative necessity that some fresh outlet should be found for the disposal of the criminal population; but, besides this, there seems ample proof that the idea of colonial expansion was at that time strong in the minds of the British people.

In 1778 Viscount Sydney, then Secretary of State for the Colonies, resolved on the foundation of a colony in that portion of the Great Southern Continent which Cook had rather inaptly termed New South Wales. In May the "First Fleet," which was to convey the expedition, was got together. It comprised the 20-gun frigate "Sirius," with its tender the "Supply"; the storeships "Golden Grove," "Fishburn," and "Borradale"; and six transports—the "Alexander," "Scarborough," "Lady Penrhyn," "Prince of Wales," "Friendship," and "Charlotte." The largest of these vessels measured not more than 450 tons, whilst the smallest was not more than 270 tons. The six transports had on board 564 male and 19 female convicts; 178 marines, officers and men; 5 medical men, a few mechanics, 40 women, wives of the marines; and 13 children. The command of the expedition was entrusted to Captain Phillip, R.N., to whom was also granted a commission appointing him Governor and Captain-General of New South Wales. Captain Hunter, of the "Sirius," was second in command, while Mr. David Collins accompanied the expedition in the capacity of Judge-Advocate.

In January, 1788, the fleet arrived in Botany Bay. A very short examination proved that the place was ill-suited for the settlement about to be founded. The soil was everywhere poor, while there was a dearth of fresh water, and in addition to these disadvantages to settlers, the depth of water was not sufficient to admit of ships of fair tonnage approaching the shore. The land northward appeared to promise bolder indentations, and Captain Phillip, taking with him three boats, proceeded in that direction, and after going a few miles, he found himself abreast of Port Jackson, marked by Cook as a boat-harbour. He entered the inlet, and found to his great surprise that he had discovered

a port in every way suited for his purpose, and, indeed, as he speedily realised, one of the most beautiful as well as most convenient harbours in the world.

The fleet now sailed round to Port Jackson, and on the 26th January, 1788, the vessels anchored in Sydney Cove, the colonists were disembarked, and Captain Phillip formally proclaimed the new colony. As only a limited supply of provisions was available from the stores, it was necessary for the settlers immediately to devote their attention to agriculture. Land was therefore cleared at the head of Farm Cove, and wheat was sown, but owing to the unsuitability of the soil in this vicinity the crop was a failure. This was a contingency against which provision had not been made, and affairs were becoming very serious, when the arrival of a ship with a fresh batch of convicts, but without stores, brought them to a head. In this emergency Captain Phillip despatched the "Sirius" to Cape Colony and the "Supply" to Batavia to procure provisions, but only a very moderate quantity could be obtained, so that within a few weeks the community was on the verge of starvation. Under these circumstances it was necessary for everyone to be placed on short allowance, while the cattle and sheep, which were introduced for breeding purposes, were slaughtered for food. To relieve the pressure on the stores at Sydney, a detachment of 200 convicts, with a guard of 70 marines, was despatched to Norfolk Island, where Lieutenant King had been sent to establish a branch colony, and had been successful in raising an abundant crop. To add to the colony's misfortunes, the "Sirius," in which the detachment sailed, was wrecked on a reef near the Island, and the prospect of relief from this source was for the time frustrated. The colony seemed to be threatened with extinction by famine, when three storeships providentially arrived and rescued the settlers from their privations. Trouble seemed, however, persistently to follow the young settlement. Several shiploads of convicts arrived, and in consequence of overcrowding and insanitary conditions on the voyage, it was found that out of a total of 1,700 who had been placed on board in England, 200 had died on the voyage, while hundreds of others were in an enfeebled or dying condition when they reached Port Jackson. Trouble was also occasioned by successful and unsuccessful attempts of convicts to escape.

After a particularly arduous administration of four years, Governor Phillip returned to England in 1792, and subsequently received a pension from the Imperial Authorities in recognition of his services. During the period elapsing till the arrival of Captain Hunter, who succeeded him, the government was administered by Major Grose and Captain Paterson, the senior military officers in the colony.

Governor Hunter arrived in 1795, and brought with him some free settlers, mainly agricultural labourers. These turned their attention to the fine alluvial land on the banks of the Hawkesbury, and before very long upwards of 6,000 acres were under crops of wheat and maize. In the following year a herd of 60 cattle was discovered at the

"Cowpastures," near Camden. These animals were the descendants of cattle that had strayed away from the settlement some years previously, and besides being a welcome addition to the available food supply, proved the adaptability of the colony for stock-raising purposes.

During Hunter's term of administration the river named after him was discovered, and the existence of workable seams of coal in its vicinity was demonstrated, and led to the foundation of the city of Newcastle. Bass and Flinders carefully examined and charted the coast line to the south of Sydney, and the former proved the insularity of Tasmania by his discovery of Bass Strait. Governor Hunter left New South Wales in 1800, the population at the time being slightly in excess of 6,000. His successor was Philip Gidley King, who had been previously appointed to the control of the branch settlement at Norfolk Island.

The new Governor soon found himself embroiled in serious trouble with the New South Wales Corps. This body had been specially recruited for service in the colony, as it was impossible to find officers of regular army regiments in England who would willingly accept virtual banishment to a far distant land to act as a sort of prison guard over convicts. Some of those who were induced to accept commissions by grants of land in the colony had never before seen service in the army, while the general idea of most of the officers seemed to be to amass fortunes as quickly as possible and return to England. It was found that the rum trade offered the speediest means to this end. Not only did the officers of the Corps import large quantities, which they retailed at enormous profits, but some of them, in defiance of Government orders, went so far as to set up stills on their own account. The Governor resolutely set his face against the traffic, and refused to allow the landing of thousands of gallons of wine and spirits. The strong stand taken by the Governor roused the bitterest opposition amongst the officers, who found themselves likely to lose their chief source of emolument by reason of his action.

Governor King had also to face serious trouble in the shape of a mutiny amongst the convicts. It was customary to set the most refractory of the prisoners to work on the roads in chain-gangs, while those who merited better treatment by consistent good conduct were assigned as servants to the free settlers. On one occasion over 300 convicts were working in chain-gangs on the road at Castle Hill, between Parramatta and Windsor, under a very small force of soldiers. The prisoners overpowered the guard, and freeing themselves from their chains, marched towards the Hawkesbury, where they counted on the assistance of the men employed near Windsor. The insurgents, however, were speedily routed by Major Johnston, who had a force of only 20 men with him. The ringleaders were hanged, and the others were allowed to return to work under strict surveillance.

The initiation of wool-growing, one of the most important events in Australian history, took place during King's administration. Captain John Macarthur of the New South Wales Corps had received a grant

of 10,000 acres of land on the Cowpasture River, near Camden, and with praiseworthy enterprise secured a small flock of Spanish merinos and commenced the experiments in wool-growing which eventually resulted in material gain not only to the originator of the idea, but also to Australia generally.

After six years of constant labour King was glad to give up the reins of office, and was succeeded in the administration of the colony by Captain Bligh. The new Governor, who assumed office in 1806, had previously won for himself a reputation for coolness and daring by his noteworthy voyage after the mutiny of the "Bounty," and subsequently at the bombardment of Copenhagen in 1798 had gained the publicly-expressed encomiums of Lord Nelson. The Imperial Authorities therefore thought that their choice had fallen on the right man to correct the abuses which King had been powerless to deal with, especially in regard to the traffic in rum. The Governor immediately on his arrival issued a stringent proclamation forbidding the bartering of strong liquors in exchange for commodities, and applying the injunction to all persons without distinction. This drastic action was viewed with the deepest resentment by a large section of the colonists, who, in spite of all authority, maintained the illicit trade throughout the whole of Bligh's term of administration. The affair which resulted in the deposition of Bligh was not directly connected with his dispute with the officers on the traffic in rum, but there can be no doubt but that Bligh's interference with the lucrative business which the officers carried on led to his downfall. Macarthur had received a summons from Atkins, the Judge-Advocate, calling upon him to answer a complaint preferred by the crew of a vessel of which he was part owner for non-payment of wages. Macarthur did not obey the order, but sent a letter defining his position in the matter. A warrant was therefore issued for his arrest, and he was brought before the Judge-Advocate and a jury of six officers of the New South Wales Corps—such being the composition of the Supreme Court at the time. Macarthur objected to the Judge-Advocate's presiding at the trial on the ground that Atkins bore him personal ill-will, and the six officers sustained his objection. Bligh refused to remove the Judge-Advocate, as indeed he had not the power to do, Atkins having been appointed by the Imperial Government.

The Governor now ordered the six officers to appear before him to justify their conduct, but they refused to obey. He also sent several messages to the Commandant, Major Johnston, requesting him to confer with him respecting the conduct of his subordinates, but that officer pleaded ill-health as his excuse for not complying with the Governor's request. Nevertheless, on the same evening Major Johnston arrived in Barrack Square, paraded his regiment, and marched in full military array to Government House, where he placed Governor Bligh in close confinement. Johnston then assumed control of affairs, and dismissed the Judge-Advocate and other prominent officials, appointing deputies in their stead.

Lieutenant-Colonel Foveaux shortly afterwards superseded Major Johnston, and he in turn was succeeded by Colonel Paterson, who came over from Tasmania to administer the government. This was about twelve months after Bligh's deposition, and although Paterson in a general way approved of Johnston's action, he nevertheless set the imprisoned Governor at liberty on condition that he proceeded home in a vessel then about to sail. Bligh promised to sail direct to England, but when he was at liberty he refused to be bound by a promise given under compulsion, and remained off the coast of Tasmania. When the Imperial Authorities became apprised of the turn affairs had taken in New South Wales they immediately despatched Lieutenant-General Macquarie to assume control of the colony. He was directed to reinstate Bligh for one day, and despatch Major Johnston under close arrest to England. He was unable, of course, to carry out his instructions with reference to Bligh, but Johnston was arrested and sent to England, where he was subsequently tried and punished with dismissal from the army.

During Macquarie's term of office a great improvement manifested itself in the moral and industrial condition of the colony, and the illicit traffic in spirits was rigidly suppressed. Education, hitherto neglected, received special attention, churches and public buildings were erected, and the work of exploration was pushed on. For the purpose of making himself personally acquainted with the conditions of life in the colony, the Governor undertook periodical journeys throughout the various districts, and no important event happened in the settlement of which the Governor was not made cognisant. In his efforts towards the amelioration of social conditions in the young colony the Governor was ably assisted by his wife, who specially devoted her attention to improving the lot of the women and children.

The Blue Mountains had hitherto formed an impassable barrier to extension of colonisation towards the west, and many attempts had been made to find a practicable route across them. In 1813, however, Messrs. Blaxland, Lawson, and Wentworth succeeded in crossing the range, and opening the way to the vast plains of the interior.

Macquarie showed great kindness to the "emancipists," as those settlers were called who had served their sentences as convicts and remained in the colony. Many of these were leading useful and honorable lives, and it was the Governor's constant effort to remove the social ban under which they laboured and to encourage them to persevere in the path of useful citizenship. The Governor also showed a large-minded tolerance in religious affairs, removing, as far as possible, the unfairness which in this respect had for some time prevailed. After the longest term of office enjoyed by any vice-regal representative, Macquarie returned to England in 1821, carrying with him the affectionate esteem of the community, with the exception of a minority who were irreconcilably opposed to his policy of toleration. He was succeeded in the administration by Sir Thomas Brisbane.

During Brisbane's term of office the work of exploration was steadily continued. In 1823 Surveyor-General Oxley was sent to survey Moreton Bay, Port Curtis, and other portions of what is now the Queensland coast. From information given by a castaway named Pamphlet, Oxley discovered the river discharging into Moreton Bay, which he named Brisbane in honour of the Governor. Hume and Hovell were despatched with an exploring party in a south-westerly direction overland from Sydney. After opening up much new country they discovered the Murray and Murrumbidgee Rivers, which, rising in the Great Dividing Range, flow westward, ultimately unite, and discharge into the sea on the South Australian coast, over a thousand miles from their respective sources.

The new Governor also encouraged the introduction of free settlers, with the result that numbers of wealthy young men came to the colony and took up land, and this in time led to the abolition of the costly Government farms. It was found also that supplies could be raised from the soil at a much lower rate than was possible under the previous conditions of Government control.

The Governor gave evidence of liberal views in other directions. Up till this time there had been a rigid censorship over newspaper articles published in the colony, but in 1824 liberty of the press was affirmed by proclamation. About this time also the old method of dispensing justice in a Court composed of a judge, assisted by assessors drawn entirely from officers of the army, was dispensed with, and trial by jury was instituted, the first properly empanelled jury sitting at the Quarter Sessions of November, 1824. To Sir Francis Forbes, the first Chief Justice, is mainly due the credit of introducing this much-needed reform. Up to this time the Governor had possessed practically absolute power over the affairs of the colony, the only restraining influence being the force of public opinion amongst the colonists, and the far-distant authority of the Secretary of State. But the colonists were granted a certain measure of self-government in 1823, when, under an Act passed by the British Parliament, it was provided that the Governor should nominate a Legislative Council of seven members, by whose advice he was to be guided.

Sir Thomas Brisbane was succeeded in 1825 by Major-General Ralph Darling, who before very long found himself involved in serious disputes with the colonists and the press. On account of some very severe strictures by the latter with reference to the conduct of public affairs, the Council passed several Acts which temporarily curtailed newspaper criticism. An indirect result of the enforcement of these Acts was that the number of members of the Council was increased from seven to fifteen in 1828. About this time the Bushranging Act was passed by the Council with the idea of putting a stop to the depredations of the bushrangers, as the desperadoes were called, who either singly or in gangs roamed over the highways, and robbed travellers indiscriminately.

During Governor Darling's administration the work of exploration was vigorously pushed forward. In 1823 Allan Cunningham made his way northwards from Bathurst towards the head waters of the Castlereagh, discovering the gap in the mountains known as the Pandora Pass, by which access was opened to the country beyond. In 1826 he penetrated northwards to the country round the Upper Darling. In 1827, crossing the Namoi and Dumaresq Rivers, he reached the Darling Downs. Next year, working inland from Moreton Bay, he discovered the practicable pass from the coast to the Downs which still bears his name. The most famous explorer of the time, however, was Captain Sturt. In his first journey Sturt discovered the Darling and traced both the Castlereagh and Macquarie to their junction with it. At the time when he passed over the country a prolonged drought had left its effects, the Darling being quite salt, while the bed of the Castlereagh was destitute of water. The inland sea which Oxley had affirmed his belief in was also proved to be non-existent. In his second expedition, on which he was accompanied by George Macleay, Sturt descended the Murrumbidgee and discovered the Murray, which he followed down to the sea.

At this time there were persistent rumours to the effect that the French contemplated the formation of settlements on the Australian Continent. Steps were therefore taken to occupy the threatened points in advance, and expeditions were despatched to Western Port and King George's Sound. At King George's Sound the township of Albany was founded, but Western Port, which the French had left in disgust, was shortly after abandoned.

Governor Darling left the colony in 1831, and was succeeded in the administration by Sir Richard Bourke, one of the most popular of the Governors who have ruled in New South Wales. It was to Bourke's suggestion that the policy of assisted immigration was due, the British Government doubling the amount voted by the Legislative Council to give effect to it. The first immigrants to arrive under this system were fifty young women from an orphan school in Ireland, and fifty-nine mechanics brought from Scotland by Dr. Lang to assist in building the Australian College.

Bourke's tenure of office was also made noteworthy by the valuable explorations conducted by Sir Thomas Mitchell, the Surveyor-General. In his first expedition Mitchell made a careful examination of the country northward from the Liverpool Plains. His second expedition had for its object the closer exploration of the districts between the Bogan and the Darling. On this occasion he found the country far different from what Sturt had experienced, for the river banks were now well-grassed, while the Darling was no longer a salt stream, but a stately river. Mitchell established the depôt of Fort Bourke, and explored the river's course for some three hundred miles. He had now established the fact of its connection with the Namoi, Gwydir, and Condamine, and therefore determined to make certain whether it joined the Murray or

flowed away westward. Next year, therefore (1836), he proceeded down the Lachlan basin to the Murrumbidgee, and thence along the Murray till he met the stream which Sturt had taken to be the Darling. This idea he proved to be correct, and then turned back with the object of ascertaining the connection between the Murray and Hume's series of rivers. But near Swan Hill he reached the Loddon, and ascending Mount Hope and Pyramid Hill, obtained the first vision of a country which so charmed him that he gave it the name of Australia Felix. Passing through this district, he crossed the Loddon and Avoca Rivers to the nead waters of the Wimmera, and later on reached the Glenelg. This stream he followed down to its estuary, and then turned eastward to Portland Bay, where he came upon the settlement of the brothers Henty. On his return journey Mitchell ascended Mount Macedon, whence he viewed the grassy plains stretching away to Port Phillip; then retracing his steps to his camp near Castlemaine, he proceeded from this point to the river Murray, which he crossed a little below the present site of Albury. Mitchell soon afterwards made a triumphal entry into Sydney, after an absence of seven months' duration.

Governor Bourke left the colony in 1837, carrying with him the esteem of the colonists over whom he had so ably ruled. As some recognition of his many services, particularly in regard to the question of religious equality, it was decided to erect a statue of him in Sydney, and in 1842 the statue was completed and placed at the Macquarie-street entrance to the Domain, where the ceremony of unveiling took place on the 11th April of the same year.

The next Governor was Sir George Gipps, who assumed office in 1838, and immediately found himself called upon to grapple with questions of very serious import. One of the most pressing of these was the abolition of the transportation system. For a long time the feeling had been growing in the colony that the day was past when New South Wales should be called upon to receive convicts, and as early as 1830 a league had been formed to ensure cessation of transportation. The Parliamentary Committee of 1837-8 had collected a volume of evidence which fairly horrified public opinion in England when it became known. In spite of the opposition of those landholders who feared that loss of convict labour would mean the destruction of their interests, an Order in Council was passed in 1840 entirely abolishing the system as far as it affected New South Wales. During the fifty-three years when transportation was in operation 82,250 convicts, of whom 70,040 were males, and 12,210 females, had been landed in Sydney. Some nine years after the passing of the Order in Council an attempt was made to revive the system, but without success. Another very important event which took place during the administration of Sir George Gipps was the granting of a new Constitution providing for the appointment of a Legislative Council consisting of thirty-six members, twelve of whom were to be nominated by the Crown, while the remainder were to be elected. The franchise

qualification was a £20 rental, or a freehold of £200 in value, and the qualification for elective members was property to the amount of £2,000, or of £100 yearly value. The first meeting of the newly-constituted Council took place on the 1st August, 1843.

In 1844 a movement was begun by the settlers in the Port Phillip district to have that portion of the continent proclaimed a separate colony. At this period the total population of what is now New South Wales, Victoria, and Queensland was not more than 150,000, the residents of the Port Phillip district numbering about 30,000. It was claimed by these settlers that the distance which separated them from the seat of government was too great to permit of their requirements receiving attention, and their claim for separation was eloquently supported by Dr. Lang, one of the six members representing the Port Phillip district in the Council. After seven years of agitation their petition was granted, and in 1851, when the population numbered 77,345, the country south of the Murray was formed into a separate colony under the name of Victoria.

Sir George Gipps retired from office in 1846, and was succeeded by Sir Charles Augustus Fitzroy. During Fitzroy's term of office, which expired in January, 1855, occurred some of the most important events in the annals of the colony. Chief amongst these was the discovery of gold in 1851. For some years before this time there had been rumours of the existence of the precious metal. In 1839 Count Strzelecki found traces of gold in iron ore at Hartley, in the Blue Mountains, but Governor Gipps, fearful of its effects on the convict community, persuaded Strzelecki to keep the matter secret. Again, in 1841, the Rev. W. B. Clarke found grains of gold in a creek near Bathurst. Speaking in England in 1844, Sir Roderick Murchison stated it to be his belief that the Great Dividing Range of Australia would be found as rich in gold as the Ural Mountains of Europe. But it was not till the Government Geologist had confirmed Edward Hargraves' discoveries in 1851, and nuggets of gold began to arrive in Sydney, that the teachings of the geologists were remembered. Almost in an instant all classes of the community were infected with the most intense excitement. The immediate result of the discovery was extremely unpleasant. The squatters were deserted by their shepherds and labourers, work in the various trades was paralysed for want of hands to attend to it, while a general suspension of ordinary business seemed about to result from the wild rush to the diggings. However, in a few years matters resumed a more sober aspect, and gold-mining took its place among the settled industries of the colony.

The year 1851 was also a memorable one through the passing of an Act by the Imperial Government providing for the granting of a larger measure of self-government for New South Wales. The desire for a free Constitution had been strong for some years before the discovery of gold, and now that the colony had received such a large

accession of free settlers consequent on the discovery, its position as a Crown dependency was becoming still more irksome. In pursuance of the powers granted by the Act, a Select Committee of the Legislative Council was appointed in 1852 to draw up a Constitution. As a result of the deliberations of this body, a remonstrance was despatched to the Secretary of State for the Colonies in which objection was taken to the form of Constitution which the Imperial Authorities proposed to grant, and after some negotiation the demands of the colonists were practically agreed to. In the report submitted by this Committee there was one extraordinary proposal. In their desire to copy as far as possible the British model, the Committee agreed to recommend an elective Assembly to represent the Commons and a nominated Council to represent the House of Peers. To provide for this Upper House the Committee recommended the establishment of an hereditary order of colonial nobility, from amongst the members of which the Upper House was to be chosen. The publication of this report raised a storm of indignation and ridicule in the metropolis. Numerously attended public meetings were held, and strongly-worded resolutions unanimously adopted denouncing the proposed establishment of a colonial peerage. Nevertheless, the Council proceeded to discuss the Committee's report in the ordinary course, but at length the tide of public opinion grew so strong that the objectionable aristocratic clause was removed, and the Constitution Act as it now stands was finally passed on the 21st December, 1853. Messrs. Wentworth and Deas-Thomson were deputed to proceed to England in order to facilitate the acceptance of the measure by the Imperial Parliament, and in July, 1855, Royal Assent was given to the necessary Bill, making the Constitution operative. The formal inauguration of the Constitution was performed by Governor Denison on the 19th December. Sir William Denison, who had just succeeded Governor Fitzroy, was sworn in under a commission from the Queen which revoked his former credentials and appointed him Governor-in-Chief of New South Wales. The writs for the first Parliament were issued on the 22nd May, 1856.

It was unfortunate that the introduction of the new Constitution should have been coincident with the arrival of Sir William Denison. His unpopular reputation had preceded him from Tasmania, and his appointment to the Governorship of the colony was viewed with a considerable amount of distrust which his subsequent conduct seemed to justify.

The outbreak of the Crimean War in 1854 had caused no little apprehension in the minds of the people of New South Wales lest they should receive an unwelcome visit from some armed Russian cruiser. It was in consequence of this that Sir William Denison decided on making some attempt at fortifying the harbour of Port Jackson. Several forts were erected and guns placed in position; the forts and guns remain to this day, monuments of the want of foresight which led to their construction and of the ease with which public money can

be thrown away in times of scare. To modern eyes the value of these preparations seems peculiarly ludicrous.

The first Ministry under Responsible Government, short-lived though it was, is worthy of record as marking a new stage in the Colony's progress. Its personnel was as follows :—Stuart Alexander Donaldson, Colonial Secretary ; Thomas Holt, Colonial Treasurer ; William Montagu Manning, Attorney-General ; John Bayley Darvall, Solicitor-General ; George Robert Nichols, Auditor-General ; and William C. Mayne, Representative of the Government in the Legislative Council. Nichols was also Secretary for Lands and Works in this Administration. Donaldson, Manning, and Darvall were appointed Members of the Executive Council on the 29th April, 1856, but they did not take office until the 6th June, as some preliminary arrangements were necessary before they vacated their seats as Members of the Legislative Assembly. Mr. Alexander Warren was also appointed a Member of the Executive Council on the 21st May, 1856, but resigned without entering upon the duties of the office.

Early in 1857 a Bill was reserved for the Royal Assent, which had for its object the repeal of so much of the Constitution Act as required the concurrence of two-thirds majorities in both Houses of Parliament in the passing of measures for the alteration of the Constitution, or of the number and apportionment of representatives in the Legislative Assembly. In the same year the public mind was greatly disturbed by the spread of a rumour to the effect that the Moreton Bay district was to be separated from New South Wales with a view to a revival of transportation to that settlement. A series of motions embodying the popular sentiment on the subject was moved by Mr. Parkes, and carried by the Assembly without division.

The subject of Federation had received considerable attention from the framers of the Constitution, and it was again brought up by Mr. E. Deas-Thomson, who moved in the Legislative Council for a Select Committee to bring up a report on the matter. This Committee subsequently met and brought up a report embodying various resolutions, but prorogation of Parliament stopped further progress.

In the year 1855 steam communication was renewed with England. It had been interrupted by the outbreak of the Crimean War, when all the available means of transport were pressed into service for the conveyance of troops and stores to the seat of operations. But so far as the colony was concerned, this year was marked by a much more important event, namely, the opening of the railway line which connected Sydney and Parramatta. On the 26th September, five years after the first sod was turned, and nine years after the railway project was mooted, the first train that ever ran in New South Wales left the Redfern Railway Station.

The year 1856 saw the erection, at the instance of Sir William Denison, of the Sydney Observatory, a great number of the instru-

ments therein being those which were originally used in the old Parramatta Observatory. The first observatory in the colony existed as far back as 1788, a view of Port Jackson at the time showing it as on the shore of Sydney Cove. On the 29th October, 1858, the telegraph line between Sydney, Melbourne, and Adelaide was opened for communication, while extensions to Bathurst and Maitland were completed two years later.

The year 1857 was marked by an unprecedented number of casualties. In many districts of the colony disastrous floods occurred, resulting in much loss of life and property. The valleys of the Hunter and Hawkesbury Rivers in particular were the scenes of much devastation. Another awful catastrophe was the wreck of the "Dunbar" at the Gap, near Sydney Heads, when, out of 120 persons, mostly colonists returning to New South Wales, only one was saved. This disaster was shortly afterwards followed by another, the wreck of the "Catherine Adamson" near the Heads, resulting in the loss of twenty-one lives. In consequence of the latter tragic occurrences, steps were taken to improve the coastal lighting in the vicinity of Sydney Heads, and a fine lighthouse was erected on outer South Head.

About the middle of 1858 reports came down the Queensland coast of the discovery of gold at Port Curtis. The find was made at a cattle station called Canoona, some seven miles from the landing-stage of what is now the city of Rockhampton, on the Fitzroy River. The discovery was greatly magnified, as was, and is, so often the case with respect to new "rushes"; and a great exodus set northwards, especially from Sydney and Melbourne. During the month no less than 4,000 miners left Sydney for Rockhampton, and the excitement grew with every shipload that left the port. A township sprang into sudden existence, and by the end of October some 10,000 miners were assembled at the scene of the "rush." But the Canoona field was as short-lived as it was famous. The area of payable workings was confined to some two and a half acres, and even in this limited space the gold was all on the surface. Deep digging was rewarded with disappointment, and the field was proved a failure. The miners flocked to Sydney, and it became necessary for the State to relieve their destitution. By the end of the year 1858 the Port Curtis field was practically abandoned, but, strange to relate, the surrounding district has since developed into one of the richest fields in the Northern Colony. Fortunately, shortly after the failure of the Canoona "rush," gold was found at Kiandra, in the neighbourhood of Snowy River, and a number of miners quickly collected on the spot, though anything like systematic exploitation was not possible during the winter months. The Kiandra field was quickly worked out for the time being; though the workings at New Chum Hill, and other places in the vicinity, have since been profitably reopened. Discovery followed upon discovery in various parts of the colony about this time, one of the most famous being that of Burrangong, or Lambing Flat, which was subsequently to give the

Government no little trouble in connection with the rioting of the diggers over the influx of Chinese.

In 1859 assembled the new Parliament, which had been elected under Cowper's measure providing for increased electoral representation, universal manhood suffrage, and vote by ballot. Every Parliament since then has been elected on the same basis, with the extension of manhood suffrage by the adoption of the principle of "One-man-one-vote"; the adjustment, from time to time, of electoral representation of population, and a few minor changes.

The first half of the year 1860 was marked by heavy and greatly destructive floods, and the Legislative Assembly was impelled to vote the sum of £3,000 for the relief of the sufferers. The gold-fields at Kiandra and Burrangong were gradually absorbing the disappointed men who had returned from the Port Curtis "rush," and considerable activity in the exploitation of the precious metal was everywhere exhibited. But if the mining industry was in a prosperous condition, so much cannot be said of the pastoral interest. About this time a new sickness broke out among the stock in the colony; this was anthrax, called locally the "Cumberland Disease," and many stock-owners were heavy losers.

The presence of large numbers of Chinese at Lambing Flat gave rise to a serious disturbance towards the close of 1860. Matters had reached such a pitch that bodies of police and military had to be despatched to the locality to maintain order. There is no doubt that the action of the Premier, Mr. Cowper, in personally proceeding to the diggings, and promising on behalf of the Government to give the miners' claims every consideration, averted what might have proved to be far more serious developments.

After the first excitement of the rush for gold had died out, the question of land settlement had to be dealt with in an entirely new spirit, to meet the requirements of a class of immigrants different to that contemplated by previous enactments. In September, 1860, Mr. Robertson introduced two Land Bills—the Crown Lands Alienation Bill and the Crown Lands Occupation Bill. The main principle of the latter Bill was that of "free selection before survey," but after a protracted debate the measure was defeated. Soon afterwards a vote of want of confidence in the administration was carried, and Parliament was dissolved.

One of the last official acts of Sir William Denison gave rise to much criticism and parliamentary attack. After a lengthy correspondence between the Imperial and Colonial Governments, the Governor made a re-grant to the heirs of a person named Tawell of certain property escheated to the Crown. Tawell was a returned convict who had been executed in England for a murder he had committed there. The grant had been drawn up in the office of a private solicitor, and the Governor demanded the Great Seal of the Colony from Mr. Cowper in order to impress the grant with it. The Premier refused to hand it over, and

pointed to a previous decision of the Cabinet on the subject. But Sir William Denison had received the command of the Secretary of State and was determined to obey it, notwithstanding the protests of the Colonial Ministry. He, therefore, insisted on the surrender of the Seal, and the Ministry handed it over, but tendered their resignations at the same time. His Excellency having completed the deed of grant, returned the Seal, but declined to receive the resignations of the Ministry. This led to a proposal in Parliament by Mr. Cowper that a Committee should be appointed to prepare an address to Her Majesty praying that she might be pleased to direct that the Great Seal of the colony should not be used except with the advice of a responsible Minister, or of the Executive Council for the time being. After some debate, however, no further action was taken in the matter.

An event of the greatest importance during the régime of Sir William Denison was the separation of the Moreton Bay district in the year 1859, and its erection into a separate colony under the name of Queensland. The agitation for separation had continued on the part of the northern settlers for many years; but they encountered a determined opposition at the hands of the representatives of the southern communities. The Imperial Government requested Governor Denison to draw up a report on the advisability of granting self-government to the residents of Moreton Bay district, and in his reply the Governor strenuously opposed the idea. When the text of the Governor's despatch was published it raised a storm of indignation in the breasts of the northerners. But the indignation was transformed into delight when Her Majesty's Government informed His Excellency that the time had arrived when "separation would be desirable," despite vice-regal arguments to the contrary; and at length, on the 13th May, 1859, Royal Letters Patent were issued creating the Colony of Queensland, and appointing Sir George Ferguson Bowen as its first Governor. The new colony was formally proclaimed on the arrival of Bowen in the month of December following, and separation from the mother-colony was an accomplished fact.

Sir William Denison surrendered office on the 22nd January, 1861. From the 23rd January to the 21st March, the Government was administered by Lieutenant-Colonel John F. Kempt, of the 12th Regiment. On the 22nd March, the Right Hon. Sir John Young arrived in the colony, but was not immediately sworn in as Governor-in-Chief, as he had reached the colony in advance of his credentials. He, therefore, took office as Administrator, and as such remained until the 15th May, when he assumed the position of Governor-in-Chief, and held it until the 24th December, 1867.

Throughout the whole of the period during which Sir John Young presided over the Government of the colony a great deal of democratic legislation was attempted, and some carried into effect. About this time the gold-miners made their influence felt as a political factor in the colony, and brought sufficient pressure to bear on the Government to

ensure the passing of a Gold-fields Bill, with especial reference to aliens. The labour market was starved through the withdrawal of hundreds to the diggings, and the Assembly voted the sum of £5,000 for the despatch to Great Britain and Ireland of lecturers and immigration agents, the choice falling upon Messrs. Parkes and Dalley, who accordingly left the colony to carry out this mission.

Early in 1861, Mr. Robertson again introduced his Land Bills, and to ensure their passing the Upper House resigned his seat in the Assembly, and on the 3rd April was sworn in as a member of the Legislative Council. In order to counteract the determined opposition which the measures aroused in the Upper House, twenty-one new members were appointed to the Council. The effect of these appointments was to bring about a parliamentary crisis, the President of the Council together with a number of the members withdrawing from the House, and, as the new members could not be sworn in, the Legislative Council ceased to exist. Under any circumstance the Council had not long to live, as its members were nominated for a term of five years only; and as no legislation had been passed in regard to a new Council, it devolved on the Governor to choose a Council whose members would hold seats for life. The nominations gave the Governor's advisers much trouble and anxiety, and the Premier, Mr. Charles Cowper, called to his aid the experience of the most capable man in the political arena of the colony—William Charles Wentworth. The Governor, on his part, was also extremely anxious in the matter of the nominations, and selected some twenty-seven names for the life period, or six above the minimum number, being advised in the matter by Edward Deas-Thomson, the most experienced person in the official life of the colony, and its virtual ruler in the days of Sir Charles Fitzroy. But there were other men of tried experience and high position, and His Excellency was in daily consultation with a little council privileged and able to advise him. Of those proposed for appointment several declined the honour, but on the 24th June, 1861, the following list of the first "life" Council was published in the *Government Gazette*. From an historical standpoint it possesses an especial interest—George Allen, William Byrnes, John Campbell, John Bayley Darvall, Robert Fitzgerald, John Fletcher Hargrave, George Kenyon Holden, Charles Kemp, John Macfarlane, Alexander Macarthur, Sir William Montagu Manning, Francis Lewis Shaw Merewether, James Mitchell, John Hubert Plunkett, John Robertson, Ralph Meyer Robey, Bourn Russell, William Russell, Alexander Walker Scott, Edward Deas-Thomson, Edward Wolstenholme Ward, John Brown Watt, and William Charles Wentworth—the appointment of the last-named as President of the Legislative Council being announced in the same number of the *Government Gazette*.

The first matter to engage the attention of the new Parliament was Robertson's deferred land legislation. At last, on the 18th September, 1861, the Crown Lands Alienation Bill and the Crown Lands Occu-

pation Bill were introduced to the Assembly by Mr. Cowper. Both Bills were passed through all their stages, and transmitted to the Legislative Council on the following day, and soon afterwards became law. A Chinese Immigrants Regulation and Restriction Bill was introduced on the 25th September, 1861, and practically embodied the legislation of Victoria on the subject. It provided for a penalty of £10 upon the owner, charterer, or master of any vessel, for every Chinese passenger arriving at the port in excess of one to every ten tons of the ship's tonnage ; and likewise for the payment of £10 by each Chinese before being permitted to land. It also provided for an annual payment of £4 by each Chinese during his residence in the colony, and there was a clause against the naturalisation of Chinese. After some differences with the Council and several amendments made in the Upper House, the Bill got through its final stages, and was assented to on the 27th November, 1861.

The question of Church and School Lands, which had been before the country for many years, again came up for discussion. In 1826 a Corporation styled the Trustees of the Clergy and School Lands in the Colony of New South Wales was empowered, amongst other things, to sell and grant leases of such lands as should be granted by the Crown, the rents and purchase money to be paid to the Treasury. The net revenue obtained was to be applied to two funds—the Improvement and Building Fund, and the Clergy and Schools Account—the former fund being devoted to the improvement of churches, parsonages, school-houses, &c., and the latter to the support of the clergy of the Established Church of England and the maintenance of schools and schoolmasters. All lands which had been set apart for the maintenance and education of orphans and all moneys pertaining thereto were also vested in this Corporation. In 1833 the affairs of the Corporation were transferred to a Board of Commissioners, and all property belonging to the Corporation at the time of its dissolution was vested in the Crown. The annual income arising from sales and leases of property was blended in one fund and paid to the Colonial Treasurer, and was applied in accordance with instructions received from the Secretary of State in the proportion of five-sevenths in payment to ministers of the Church of England, Presbyterian, Roman Catholic, and Wesleyan Methodist Churches, and two-sevenths to the purposes of public instruction. In 1864 it was urged in Parliament that, on the dissolution of the Corporation previously alluded to, the Clergy and School Lands became waste lands of the Crown, and the revenue arising from them should be paid into the Consolidated Revenue Fund, but by a decision of the Supreme Court it was held that these lands were not so disposable, but had reverted to and become vested in the Crown for the promotion of religion and education in the colony.

The matter of an elective Legislative Council, with a modified franchise on the basis of the Assembly's membership, was again brought forward in 1861. A Bill dealing with the question had

passed the Assembly in the preceding session and had not been proceeded with, and a similar Bill was introduced by the Attorney-General into the Council and referred to a Select Committee. At the close of the session this Committee brought up a progress report, wherein they stated that they had discussed the subject, but had not had time to mature their views. All through this particularly active legislative period the question of an elected Upper House was a burning one. Wentworth, disappointed with the failure of his proposed nominee chamber, lent the weight of his approval to the measure of reform. In June, 1862, the Attorney-General again introduced a Bill, which, after argument, was referred to a Select Committee. The property qualifications recommended by this Bill were—Freehold or leasehold for an unexpired term of at least 21 years, or of the value of £300, or £20 per annum : leasehold if for a less term, of £50 per annum ; household occupancy paying rent of £50 per annum, or pastoral tenure of Crown Lands at £20 per annum. The Hare system of voting for election was advocated. It was also proposed to introduce a principle which provided for the appointment of nominated members selected for special services, who should hold their seats for life. After passing through all its stages in the Council, this Bill was sent to the Legislative Assembly on the 8th October, where, after being debated for some time, it was allowed to drop. Another measure which aroused a good deal of controversy was the Bill to prohibit future grants of public money in aid of public worship. Prior to the third reading, requests were put forward by the clergy of the Church of England for permission to represent their case by Counsel, and later Mr. Gordon was heard at the bar of the House. The Bill passed the Assembly and was transmitted to the Legislative Council, where various protests were lodged against its acceptance. The Council made certain amendments in the measure, which, however, were not insisted on, and having passed through its remaining stages, it was reserved on the 10th December for the signification thereon of Her Majesty's pleasure, which was given in due course.

The question of cotton cultivation was one of extreme interest during the early sixties, when the American Civil War was at its height. Members had curious visions of a second America, white with a wealth that should replace that of the gold-field days, already drifting into a memory. On the 27th June, 1862, Mr. Hay obtained leave to introduce a Bill for the encouragement of cotton-growing. The Act provided that grants of portions of waste lands might be made on certain conditions to associations and responsible persons who would undertake cotton culture. The Bill passed both Houses and received the Royal Assent.

On the 9th October, 1862, Mr. Wentworth vacated the President's chair in the Legislative Council, and was succeeded by Mr. Terence Aubrey Murray, formerly Speaker of the Legislative Assembly. In the meanwhile Messrs. Parkes and Dalley, emigration agents and lecturers, were recalled from their mission to Great Britain and Ireland

in pursuance of a resolution of the House of Assembly, adopted on the motion of Mr. Robertson.

During the interval that elapsed between the session of 1862 and that of 1863, an Intercolonial Conference was held in Melbourne to discuss the existing tariffs, and certain other matters affecting the interests of the colonies. A more extended reference to the deliberations of this Conference will be found in the chapter dealing with the history of Victoria.

On the 19th August, 1863, Mr. James Martin (afterwards Chief Justice of the Colony) moved:—"That, in the opinion of this House, the alarming insecurity for life and property which has so long prevailed throughout the country districts is in a high degree discreditable to Her Majesty's Ministers in this colony; and, secondly, that the conduct of Her Majesty's Ministers in this colony, in the appointments to the Magistracy, and generally in connection with the administration of justice, has been such as to call for the strong condemnation of this House." Indeed, the condition of the country districts had grown to be alarming in the extreme. Acts of bushranging (or of "robbery under arms") were of daily occurrence, and the police appeared powerless to cope with the evil. Highway robbery is an invariable practice in young countries where means of communication and transit are limited. From the earliest times it had been the experience of New South Wales and Van Diemen's Land, where a large prison population and the scattered nature of settlement made it an extremely difficult task effectively to deal with criminal escapees. Victoria drew several highwaymen to her country districts as soon as gold discoveries had made it profitable to "stick up" escorts and mail coaches. It was not until the colonies were traversed by railroads and threaded by telegraph wires that life and property could be considered as being at all safe. It was by no means the first time in the history of New South Wales that extraordinary legislation had been demanded to combat the great evil of bushranging; and Van Diemen's Land was also obliged to make strenuous efforts to put down this pest. The Bushranging Act of New South Wales, one of the most remarkable measures known in the colony, was passed by the old Legislative Council in 1830, at a single sitting. The debate on Mr. James Martin's resolutions concerning bushranging, moved on the 19th August, 1863, continued until the 27th of the same month, when the resolutions were negatived by 44 to 18. On the first of the month following Mr. William Forster moved that the proceedings and results of the recent Intercolonial Conference held at Melbourne had been highly unsatisfactory, and his resolution was lost by 27 to 16.

The year 1863 witnessed the initiation of the long-protracted Riverina district trouble. On the 2nd September Mr. Morris presented a petition from the inhabitants of that part of the colony praying for the establishment of their district as a distinct one, with defined boundaries, on the same footing as that of Port Phillip before separation, and

with a superintendent or sub-governor. The petition was received, and on the same evening a similar petition to the Governor, with the reply of the Colonial Secretary thereto, was laid on the table. The letter of the Colonial Secretary was to the effect that the Government were not prepared to recognise the necessity of defining any portion of the existing colony of New South Wales as a distinct province; and that the appointment of a Government superintendent would impede rather than expedite the transaction of public business. Amidst their arduous duties the members of the Assembly found time to attend to their own particular affairs, and, on a resolution moved by Mr. Stewart, affirmed, by 19 to 13, that it was desirable that members of Parliament should be entitled to travel by railway free of charge.

Sir John Young retired from the Government of New South Wales on the 24th December, 1867, and Sir Trevor Chute, K.C.B., administered the Government till the arrival of the Earl of Belmore, who entered office on the 8th January, 1868. About a week after the installation of the new Governor, the Duke of Edinburgh arrived in the colony, and was received with great demonstrations of loyalty. A feeling of widespread horror pervaded all classes when news respecting his attempted assassination on the 12th March became known. The party feeling, aroused by the suggestions—very widely believed—that this unfortunate occurrence was instigated by a certain section of the community, forms one of the most regrettable incidents in the annals of the colony.

On the 18th March Mr. Martin moved, and Mr. Robertson seconded, a motion for the suspension of the Standing Orders, with a view to the passing through all its stages in one day of a "Bill for the Better Security of the Crown and Government of the United Kingdom, and for the Better Suppression and Punishment of Seditious Practices and Attempts." The Bill passed through all its stages in both Houses in one day, and assent thereto was reported on the next day. The Treason Felony Act, brought in by Mr. James Martin, was, in its scope and language, according to the reported words of that gentleman, "sufficiently large to include any attempts at deposing the Queen, establishing a Republic, putting down the Courts of Law, or any designs which may exist here or elsewhere for any such purposes as those."

Shortly after the departure of the Duke of Edinburgh for England, Mr. Henry Parkes, in a speech delivered at Kiama, stated that he held conclusive proof that the attempted assassination of the Prince was the result of a deliberate plot, and further, that someone who had a guilty knowledge of the secret, and whose fidelity was suspected, had been foully murdered. These statements created a profound impression throughout the country, and in the early part of 1869 formed the subject of an inquiry by a Select Committee of the Legislative Assembly. This Committee, in its report, practically declared that the statements made by Mr. Parkes were unsupported by the evidence adduced. However, when the report came before the Assembly, Mr. Parkes

secured its rejection by a substantial majority, and had it expunged from the records. The Assembly then adopted resolutions condemnatory of the methods employed by the Select Committee in conducting the inquiry.

On the 15th December, 1868, the Triennial Parliaments Bill was introduced by Dr. Lang. On the 22nd January following, the second reading of the Bill was negatived by 20 to 18, and it was then discharged by the casting vote of the Speaker. It was, however, subsequently reintroduced and passed in 1874.

In the months of June and July, 1870, an Intercolonial Conference was held in Melbourne, at which representatives from New South Wales, Victoria, and South Australia were present, the New South Wales delegates being the Hon. Charles Cowper, Colonial Secretary, and the Hon. Saul Samuel, Colonial Treasurer. Information respecting the deliberations of this body will be found in the chapter of this work dealing with the history of Victoria.

The year 1870 was the hundreth anniversary of the discovery of the eastern coast of the Continent by Captain Cook, and it was felt that it would be a peculiarly appropriate year for an Intercolonial Exposition. Queensland, South Australia, Tasmania, and Victoria furnished exhibits illustrative of their resources, but New Zealand was not represented. The Exhibition was held in a building erected in Prince Alfred Park by the City Corporation at a cost of £20,000, and, in spite of various drawbacks, was a pronounced success.

During the elections following immediately on the dissolution of Parliament in 1872, considerable feeling was displayed in the Southern Border Electorates over the separation question. Mass meetings were held at Albury, and attempts were made to revive the agitation for the separation of the Riverina from the mother colony.

The Earl of Belmore retired from the Government of New South Wales on the 22nd February, 1872, and an interval of about four months elapsed before the arrival of Sir Hercules Robinson, during which time the Government was administered by Sir Alfred Stephen. On the 3rd June, 1872, the new Governor assumed office under a Commission appointing him Governor and Commander-in-Chief of New South Wales.

On the 7th May, 1873, Sir James Martin announced in the Legislative Assembly the death of Mr. William Charles Wentworth, and moved that as a fitting tribute of respect the House should adjourn, which was accordingly done. On the meeting of the Legislative Council, on the day following, that House also adjourned in token of respect to Mr. Wentworth's memory.

Legislative activity at about this period concerned itself most particularly with the Border duties. A Bill to make provision for free intercourse across the boundary-line of the river Murray was introduced by Mr. Parkes on the 12th June, 1873, and passed the Assembly by a

large majority. The Bill was, however, shelved by the Legislative Council by a majority of one in a very small House. The action of the Council caused much irritation in the Assembly, and the Premier announced his intention of taking steps to reform the Upper House. About this time the Government introduced a public works policy of an expansive character involving the construction of four separate lines of railway, as well as various harbour works and public buildings, the whole involving an expenditure of £1,562,000; and in order to have labour for the construction of these works, it was proposed to set apart £50,000 for immigration purposes. This public works policy was continued for a little over fifteen years under various administrations.

Towards the close of 1874 the Governor announced to the House the intention of the Imperial Authorities to take over the Fiji Islands in the South Pacific, and in pursuance of this policy he proceeded to the islands, and formally took possession of the group in the name of Her Majesty.

During Sir Hercules Robinson's term of office the first "through" cable message was received from England; railway communication with Melbourne was carried on within the Victorian territory from the metropolis of that colony as far as Wodonga; the cable from La Perouse to Wakapuaka was opened, and direct telegraphic communication between New South Wales and New Zealand thereby established; the railway from Sydney to Bathurst was opened to traffic; the overland telegraph line from Adelaide to Perth was completed, and the "Seven Colonies" were thus brought within sympathetic earshot.

But, perhaps, the most important event marking Sir Hercules Robinson's term of office was of political and not of material significance. This was the institution in New South Wales of Triennial Parliaments. The first Parliament elected under the Constitution Act met on the 22nd May, 1856; and the duration of Parliament, unless it should be previously prorogued, was originally fixed at five years; but in 1874 an Act was passed establishing Triennial Parliaments, and this Act has ever since remained in force.

On the day following the departure of Sir Hercules Robinson (the 20th March, 1879), Sir Alfred Stephen took up the duties of Administrator, and discharged them until the 3rd August, when Sir Augustus William Frederick Spencer Loftus, P.C., G.C.B. (commonly called Lord Loftus), entered on his term of office as Governor.

The holding of the first International Exhibition was a great event in Lord Loftus' régime. The previous Intercolonial Exhibition having proved so successful, it was determined that this one should partake of an international character. The management of the affair was originally in the hands of the Agricultural Society, but it assumed such large proportions that the Government determined to take it over, and entrusted the work to an honorary Commission. The Exhibition was held in a commodious building called the Garden Palace, and was in

every respect a pronounced success. On the advantage to commerce resulting from it there is little need to dwell. Unfortunately the building was burnt to the ground in 1882, and many valuable documents were destroyed.

The colony gave further proof of its power and its resources in the despatch of a military contingent to the British Army which had been working its way up the Nile in an endeavour to rescue General Gordon. The prevailing uncertainty as to the fate of the gallant Governor of Khartoum caused profound anxiety in the colony, and the Acting Premier, the Hon. William Bede Dalley, with the sanction of the Ministry, offered the armed assistance of New South Wales. It was thought that an expedition from Suakim to the Nile was about to be undertaken, and under this impression the New South Wales Government suggested the despatch to Suakim of a force of infantry and artillery, together with the necessary supply of horses. The offer of the colony was accepted. On the 3rd March, 1885, the Australian Contingent, as it was called, although it was really the New South Wales Contingent, sailed from Sydney to Suakim in two large steamships, the "Iberia" and the "Australasian," which left Port Jackson amid the wildest enthusiasm. This was the first military support ever tendered by any of these colonies to the mother country. The day of departure was proclaimed a public holiday, and no more brilliant and exciting spectacle had ever been seen in Sydney than was witnessed on the day of departure of the troops. The military plans for the Egyptian campaign were subsequently modified, and the little army returned in safety on the 24th June, nearly four months from the date of their setting forth, without having seen much service; but the impression produced in England by the spontaneous loyalty of the colonies was extraordinary, and this impression has been accentuated by the presence of Australian troops at the Jubilee Celebrations, the subsequent visit of a squadron of the New South Wales Lancers to England, and lastly, by the despatch of troops from the various Australasian colonies to assist the British forces in the Transvaal. The Soudan Contingent gave rise to a new estimate of the value of the Colonial Empire, and stimulated greatly the discussion of the whole question of Imperial Federation.

During Lord Loftus' term of office, a leading topic of conversation in social and political circles, and a source of Ministerial trouble and worry, was the celebrated Millburn Creek Copper-Mining Company scandal, which involved the reputation and probity of several persons occupying leading positions in the community. Among other events deserving of record, His Excellency's period of administration was marked by the successful sinking of the first artesian bore in Australia at Killara, New South Wales; and by the first issue of silver coin at the Sydney Mint. During this year the National Park, the largest of the metropolitan pleasure-grounds, was dedicated to the people of New South Wales, and it is intended that this locality shall, as far as possible, preserve for all time its distinctive scenery.

One of the most important measures passed in the colony since the introduction of Responsible Government, was the "Bill to make more adequate provision for Public Education," introduced by Sir Henry Parkes in 1879, and assented to in 1880. This Bill, known as the "Public Instruction Act of 1880," repealed the Public Schools Act of 1866, and dissolved the Council of Education, the powers of which were entrusted to the Minister of Public Instruction. The Bill abolished State aid to denominational schools and established a secular and compulsory system with free education for the children of those who were not in a position to pay the small fee imposed by law.

Another important enactment in 1879 was the Electoral Bill. This Bill, assented to in 1880, repealed the Electoral Act of 1858, divided New South Wales into 68 electoral districts, and increased the number of members to serve in the Assembly to 103.

Allusion has been made to the vexed question of Church and School Lands. This was finally disposed of by a measure called the Church and School Lands Dedication Act, which was assented to in 1880, and vested the control of the Church and School Lands in the Legislature of New South Wales, and applied the income arising therefrom to the purposes of public instruction. An Intercolonial Conference commenced its sitting in Melbourne on 26th November, 1880, the colonies represented being New South Wales, Victoria, and South Australia. Various matters of intercolonial concern were discussed, such as concerted action with respect to the influx of Chinese, the appointment of a Federal Council to deal with questions affecting the colonies in common, Border duties, &c.

On the 7th July, 1881, Sir Henry Parkes introduced his Chinese Restriction Act, and it received the Royal Assent on the 6th December. Provision was made for the payment of £10 by every Chinese entering the colony by sea or land, and restrictions were placed on the number which could be introduced by any one vessel. Severe penalties were provided for any infringement of the law.

The year 1883 witnessed the completion of the railway from Sydney to Melbourne. The line from the Southern capital to Wodonga had been opened in 1875, but it was not till eight years afterwards that the Southern line from Sydney reached this part of the border. Two years later the massive railway bridge crossing the Murray at Albury was completed, thus joining the colonies by an iron link. An important feature of the year 1883 was the discovery of the rich silver deposits at Broken Hill. In 1885 the Broken Hill Proprietary began operations, and during the period extending from that year to 1899 silver to the value of £20,561,000 was produced.

Amongst the remaining events of importance during the administration of Lord Loftus were the establishment of the Board of Technical Education, and the completion of the railway line to Bourke, on the river Darling. Lord Loftus' term of office came to a close on the 9th November, 1885, and his successor, the Right Hon. Baron Carrington,

did not arrive in the colony till the 12th December following. In the meantime Sir Alfred Stephen discharged the duties of Lieutenant-Governor.

On the 23rd March, 1887, a terrible disaster occurred at the Bulli Colliery, when 83 miners lost their lives through an explosion of gas in the workings of the mine. As a result of the inquiry following on the catastrophe, the Legislature took steps towards minimising the possibility of such accidents occurring in the future.

The close of the year 1887 witnessed the completion of the present scheme of waterworks for the metropolitan district. In the early days of settlement the colonists had to be content with the waters of the "Tank Stream." At a later date a supply was obtained from the natural reservoir at Botany, but as this proved inadequate for the ever-increasing population, the present scheme, which is among the most perfect in the world, was initiated. The sources of supply are the waters of the Nepean, Cataract, and Cordeaux Rivers, draining an area of 354 square miles, the catchment area enjoying a copious and regular rainfall. The off-take works are built at a height of 437 feet above sea-level, and the water flows through a series of conduits, partly tunnel, partly open canal, and in places wrought-iron aqueducts, to Prospect Reservoir, a distance of 40 miles from the farthest source of supply. Here a storage reservoir has been constructed, capable of holding 11,000 million gallons, of which nearly 7,000 millions are available for supply by gravitation. From Prospect the water flows into various distributing and pumping reservoirs. During the year ended 30th June, 1899, the total amount of water supplied was 6,860,146,000 gallons, but this quantity by no means adequately represents the capacity of the available supply.

Early in 1888 the public mind was much exercised by the large influx of Chinese immigrants, who, in spite of the "Chinese Restriction Act of 1881," had been arriving in rather alarming numbers. In the preceding twelve months no fewer than 4,436 Chinese subjects had arrived in the country. Early in May two vessels arrived in Port Jackson bringing a large number of the aliens, but they were not allowed by the Premier, Sir Henry Parkes, to land. However, this action on the part of the Premier was contrary to law, and the matter was brought before the Supreme Court, with the result that he had to give way. Feeling still ran high in the colony, and at length, on the 11th July, 1888, Parliament voiced the sentiments of the people by passing a drastic "Chinese Restriction Act." Under the provisions of this measure, which is still in force, no vessel is allowed to carry more than one Chinese passenger to the colony to every 300 tons; such Chinese as land are required to pay a poll-tax of £100; they are not permitted to engage in mining without authority from the Minister of Mines; nor are they permitted to take advantage of the Naturalisation Act. An exception is made in the case of Chinese who, by birth, are British subjects. Provision is made for a penalty of £500 for a breach of the

Act. This measure has, of course, tended greatly to reduce the number of Chinese immigrants, but it is believed that not a few manage to elude the vigilance of the police, and enter the colony by the landward borders. In 1887 the number of Chinese immigrants into New South Wales was 4,436; in 1888 it had fallen to 1,848, and in 1889 to 7. During 1899 the number recorded was 36, of whom 31 were British subjects.

From the year 1885 the colony began to suffer from a stoppage in the tide of prosperity, which people had fondly accustomed themselves to regard as permanent. In 1886 employment became difficult to obtain, and wages consequently fell. In the years 1886-7 work was suspended in some of the Southern collieries by strikes and disputes. On the 24th August, 1888, 6,000 coal-miners in the Northern district collieries laid down their tools. Ill-feeling between the owners and men ran high, and was further accentuated by the arrest of several miners on a charge of rioting. However, the sentences passed on these men were afterwards remitted by the Governor. This strike ended in November, but, after a short intermission, was renewed. In the years 1888-9 the completion of various large public works, and the depletion of the Treasury of loan money, threw out of employment some 12,000 men, no inconsiderable portion of the unskilled labour of the colony. In September, 1890, the Broken Hill silver-mines closed down through a renewal of the strike. Soon after this a conference of employers issued their manifesto. The Intercolonial Labour Conference held its first meeting on the same day (12th September), and on the next issued a manifesto in reply to that of the employers. Fully 40,000 men left off work in response to the demands of the Conference, and on the 16th these were joined by various trolly and dray men. This was in the height of the wool season, and the carriage of wool through the city had to be undertaken by volunteer drivers. Shortly afterwards a shearers' strike took place, involving some 20,000 men. Again, in 1892, the miners at Broken Hill turned out on strike, and the silver-mines had to lie idle for over four months. On the 4th July, 1893, a general strike of seamen on the intercolonial steamers began, and ultimately ended in the defeat of the workers.

From 1872 to 1886 the Government of the colony had pursued what was popularly termed a spirited policy of public works. The completion of the works undertaken in pursuance of this policy threw large numbers of men on the labour market, and thus tended to reduce the wages of those who remained in employment. This cessation of public works also brought about the practical discontinuance of State-aided immigration, which had been the policy of the country for over fifty years. In 1883 the number of immigrants assisted to the colony by the State was 8,369; in 1886 it had fallen to 4,081, in 1887 to 1,362, and in 1888 it was only 528.

Lord Carrington's term of office was marked not alone by strikes and industrial disturbances, but by droughts, bush-fires, and floods. Early in March, 1888, immense loss was caused by the raging of bush-fires in

many parts of the country, and further devastation was wrought by fires in the month of October, 1890. In May, 1889, the greater portion of the low-lying suburbs of Sydney was under water through excessive rains, while the Hawkesbury River was in flood. In September following heavy floods occurred on the Murray. In January, 1890, the Clarence and Richmond Rivers overflowed their banks, working great havoc in the lower portions of their courses. February and March, 1890, were noted for excessive rains, causing disastrous floods on most of the Northern coastal rivers. In April the towns of Bourke and Louth, in the far west, were inundated. Shortly afterwards the basins of the Darling and Murrumbidgee were the scenes of devastating floods.

From the 6th to the 14th February, 1890, the Federation Conference sat in Melbourne, and determined the preliminary details for the holding of a National Convention, such as was advocated by Sir Henry Parkes in the month of October preceding; and on the 7th May Sir Henry Parkes moved the Federal Convention resolutions in the New South Wales Legislative Assembly. Later on, the National Convention was arranged for in all its various details, and was held in due course in the first year of the Jersey régime.

Amongst other matters of importance which characterised Lord Carrington's term of office in the colony were the inauguration of a weekly mail service to England on the 1st February, 1888; the completion of the railway line from Murrumburrah to Blayney; the opening of the Centenary Universal Exhibition on 14th March, 1888; the completion and opening of the final section of the Illawarra railway; the completion of the great iron railway bridge over the Hawkesbury River; the laying of a duplicate cable between New South Wales and New Zealand; and the passing of a Payment of Members' Bill, which received Royal Assent on 20th September, 1889.

Lord Carrington left Sydney on 1st November, 1890, and on 15th January, 1891, his successor (the Earl of Jersey) arrived, the affairs of the colony being in the interval administered by Sir Alfred Stephen. Two days after the Governor's arrival the coastal district was visited by a terrific storm, and heavy rainfall. The severity of the weather delayed the completion of the Parliamentary elections of 1891 in various districts of the colony.

The year 1891 was also distinguished by the appearance of Labour as an element in practical politics. New South Wales was the first country in the world which endeavoured to settle labour grievances through the ballot-box, and to send a great party to Parliament with a direct representation of Labour. Several attempts had been made by Labour candidates to enter Parliament at by-elections; and although in one or two cases they were successful, the persons elected were not labour members in the sense in which the term is now understood. In June, 1891, a concerted effort was made by the Labour organisations, when the following manifesto was put forth:—(1) Electoral reform to provide for the abolition of plural voting; the abolition of money deposits in Parlia-

mentary elections; extension of the franchise to seamen, shearers, and general labourers by means of a provision for the registration of votes; extension of the franchise to policemen and soldiers; abolition of the six months residential clause as a qualification for the exercise of the franchise; single member electorates and equal electoral districts on adult population basis; all Parliamentary elections to be held on one day, and that day to be a public holiday; and all public-houses to be closed during the hours of polling. (2) Free, compulsory, and technical education, higher as well as elementary, to be extended to all alike. (3) Eight hours to be the legal maximum working day in all occupations. (4) A Workshop and Factories Act, to provide for the prohibition of the sweating system; the supervision of land boilers and machinery, and the appointment of representative working men as inspectors. (5) Amendment of the Mining Act, to provide for all applications for mineral leases being summarily dealt with by the local wardens; the strict enforcement of labour conditions on such leases; abolition of the leasing system on all new gold-fields; the right to mine on private property; greater protection to persons engaged in the mining industry; and inspectors to hold certificates of competency. (6) Extension to seamen of the benefits of the Employers' Liability Act. (7) Repeal of the Masters and Servants Act and the Agreements Validating Act. (8) Amendment of the Masters and Apprentices Act and the Trades Union Act. (9) Establishment of a Department of Labour, a national bank, and a national system of water conservation and irrigation. (10) Elective magistrates. (11) Local government and decentralisation; extension of the principle of the Government as an employer, through the medium of local self-governing bodies; the abolition of the present method of raising municipal revenue by the taxation of improvements effected by labour. (12) The Federation of the Australasian colonies upon a national as opposed to an Imperialistic basis; and the abolition of the present Defence Force and the establishment of our military system upon a purely voluntary basis. (13) The recognition in our legislative enactments of the natural and inalienable rights of the whole community to the land—upon which all must live, and from which by labour all wealth is produced—by the taxation of that value which accrues to land by the presence and needs of the community, irrespective of improvements effected by human exertion; and the absolute and indefeasible right of property on the part of all Crown tenants in improvements effected on these holdings. (14) All Government contracts to be executed in the colony. (15) Stamping of Chinese-made furniture. (16) Any measure that will secure for the wage-earner a fair and equitable return for his or her labour. At the general elections in June, 1891, the Labour Party's candidates plunged into the battle with their platform of the foregoing sixteen clauses. For the first, or metropolitan, batch of elections, fifty-two members were required, and the Labour Party scored heavily. Twenty-seven candidates were nominated, and eighteen seats out of the fifty-two

were captured, and even in those metropolitan constituencies where the Labour candidates failed, they nevertheless obtained a large number of votes. When the contest was over, the Labour Members in Parliament numbered thirty-five; but besides these some dozen or more members were prepared to support every plank in the Labour platform. Some of the constituencies cast a block Labour vote. For instance, Balmain sent four Labour Members to Parliament, Canterbury two, Forbes two, West Sydney four, Young two, Redfern two, and Newcastle two; while seventeen other constituencies sent one each. The party did not long remain united; and on the displacement of the Government of Sir Henry Parkes and the accession to office of Mr. (afterwards Sir) George Dibbs, of the thirty-five original members eighteen voted with the Government, and seventeen with the Opposition. Later the party became further disorganised, and a new "Democratic Party" was formed out of the fragments, with a platform comprising the following planks:—Regulation of factories and workshops, regulations of coal-mines and mining on private property, repeal of the conspiracy laws, amendment of the Masters and Servants Act, an amended Land Bill, abolition of pensions, and the restriction of alien and pauper labour. The newly reorganised party was definitely pledged to a solid vote on every issue in which the existence of the party was threatened; and though now less numerically powerful than it originally was, it is still essentially a factor to be reckoned with.

On the 2nd March, 1891, the Federation Convention held its first sitting in the New South Wales Legislative Assembly, under the Presidency of Sir Henry Parkes. On the 9th April the National Federation Convention, after twenty-two days of deliberation, completed its labours, and was dissolved, after having agreed upon an Australian Commonwealth Convention Bill. The delegates taking part in this historic conference had been appointed by the different Australasian Parliaments, and numbered forty-five. The Convention was called together at the instance of the Hon. James Munro, the Premier of Victoria, and the colonies represented were New South Wales, Victoria, Queensland, South Australia, Tasmania, Western Australia (each sending seven delegates) and New Zealand (sending three). The Draft Bill framed by the Convention of 1891 did not, however, meet with the approval of the various Colonial Parliaments, though it afterwards formed the basis of the Bill adopted by the Convention held six years later. During the Convention of 1891, the Premiers of the colonies, assembled together as delegates from their respective provinces, met at the Colonial Secretary's office in Sydney, to discuss matters affecting their common Australian interest; and this was the first occasion of the gathering together of such a representative group.

The Australasian Auxiliary Squadron arrived in Port Jackson on the 5th September, 1891. It consisted of five fast cruisers and two torpedo gun-boats—viz., the "Katoomba," the "Ringarooma," the "Mildura," the "Wallaroo," the "Tauranga," the "Boomerang," and

the "Karrakatta." The fleet was created under the provisions of the Australasian Naval Force Act, which was assented to on the 20th December, 1887, all the Australasian colonies entering into an agreement with the British Government for the payment of a subsidy towards its maintenance.

Among other incidents and events of Lord Jersey's term of office were the entering of the colonies into the Universal Postal Union; a temporary run on the Government Savings Bank at Sydney in February, 1892; and the opening of the Women's College.

In 1893 occurred the financial crisis which shook Australia to its foundations. Reference has just been made to the temporary run on the Government Savings Bank on the 11th February, 1892. This was the result of a groundless rumour regarding its stability. Far otherwise was the banking crisis of 1893. Bank after bank operating in the Australasian colonies suspended payment. A shipment of £900,000 in gold was made from London to meet the requirements of Australia. Panic was general. The Dibbs Government endeavoured to allay the financial perturbation by declaring bank notes to be a legal tender and guaranteeing their payment by the State from the 15th May to the 13th November, 1893, after which date this expedient was no longer needed. The action of the Government had excellent effect, but public confidence had received such a staggering blow that it was long ere it recovered. The Ministry of Sir George Dibbs gave way in August, 1894, to one led by Mr. G. H. Reid. The principal Parliamentary events during Mr. Reid's tenure of office were the passing into law of the following measures:—

Land and Income Tax Act, Crown Lands Act—introducing the principle of homestead leases and settlement leases, Audit Act Amendment, Public Service Act—removing the appointment and promotion of officers from the control of political heads and placing them under independent Commissioners, Water Rights Act, Factories and Shops Act, Public Health Act, Advances to Settlers Act, and Federation Enabling Act.

Sir Robert Duff, who succeeded Lord Jersey in 1893, died on the 15th March, 1895, while still in office. Sir Frederick Matthew Darley took up the administration, and continued his duties till the arrival of Viscount Hampden on the 21st November, 1895.

In January and February, 1895, a Conference of Premiers, at which all the colonies except New Zealand were represented, was held at Hobart, for the purpose of arranging a scheme of Federation on a basis which might secure a more speedy realisation of the hopes of Federationists. It was decided to ask the Parliament of each colony to pass a Bill enabling the electors qualified to vote for Members of the Lower House to choose ten persons to represent the colony on a Federal Convention. The work of the Convention is elsewhere described.

In September, 1899, Mr. (now Sir William J.) Lyne displaced Mr. Reid, who had held office for more than five years—a longer term than

any preceding Premier. Sir William Lyne is still in office. The principal measures passed by his Government may be mentioned:—The Friendly Societies Act and the Navigation Act—which had been introduced and advanced certain stages by the previous Government; the Miners Accident Relief Act; the Early Closing Act; the Gold Dredging Act; the Reappraisement Act; the Sydney Harbour Trust Act; the Darling Harbour Wharfs Resumption Act; and the Old-age Pensions Act.

Viscount Hampden's term of office ended on 6th March, 1899, and from 7th March to 18th May Sir Frederick Darley discharged the duties of Governor. Earl Beauchamp assumed vice-regal office on 18th May, 1899, and remained in the colony until 1st November, 1900, when the Lieutenant-Governor, Sir Frederick Darley, again took up the duties pending the arrival of a new Governor.

In the following table will be found a list of the successive Ministries which have held office since the introduction of Responsible Government, with the duration in office of each:—

No.	Ministry.	From—	To—	Duration.	
				months.	days.
1	Donaldson	6 June, 1856	25 Aug., 1856	2*	19
2	Cowper	26 Aug., 1856	2 Oct., 1856	1	6
3	Parker	3 Oct., 1856	7 Sept., 1857	11	5
4	Cowper	7 Sept., 1857	26 Oct., 1859	25	20
5	Forster	27 Oct., 1859	8 Mar., 1860	4	11
6	Robertson	9 Mar., 1860	9 Jan., 1861	10	0
7	Cowper	10 Jan., 1861	15 Oct., 1863	33	7
8	Martin	16 Oct., 1863	2 Feb., 1865	15	18
9	Cowper	3 Feb., 1865	21 Jan., 1866	11	19
10	Martin	22 Jan., 1866	26 Oct., 1868	33	6
11	Robertson	27 Oct., 1868	12 Jan., 1870	14	16
12	Cowper	13 Jan., 1870	15 Dec., 1870	11	3
13	Martin	16 Dec., 1870	13 May, 1872	16	28
14	Parkes	14 May, 1872	8 Feb., 1875	32	26
15	Robertson	9 Feb., 1875	21 Mar., 1877	25	13
16	Parkes	22 Mar., 1877	16 Aug., 1877	4	24
17	Robertson	17 Aug., 1877	17 Dec., 1877	4	0
18	Farnell	18 Dec., 1877	20 Dec., 1878	12	3
19	Parkes	21 Dec., 1878	4 Jan., 1883	48	16
20	Stuart	5 Jan., 1883	6 Oct., 1885	33	2
21	Dibbs	7 Oct., 1885	21 Dec., 1885	2	14
22	Robertson	22 Dec., 1885	25 Feb., 1886	2	3
23	Jennings	26 Feb., 1886	19 Jan., 1887	10	24
24	Parkes	20 Jan., 1887	16 Jan., 1889	23	27
25	Dibbs	17 Jan., 1889	7 Mar., 1889	1	20
26	Parkes	8 Mar., 1889	22 Oct., 1891	31	16
27	Dibbs	23 Oct., 1891	2 Aug., 1894	33	11
28	Reid	3 Aug., 1894	13 Sept., 1899	61	10
29	Lyne	14 Sept., 1899	.....	.....	

VICTORIA.

THE first authentic identification of the Colony of Victoria dates from the 19th April, 1770, when Captain Cook, in the barque "Endeavour," sighted the eastern coast of Australia at a spot which he named Point Hicks—probably the Cape Everard of to-day. Twenty-seven years afterwards a store ship was wrecked on one of the islands beyond Cape Howe, and some of the crew, reaching the mainland, walked along the coast a distance of 240 miles to Sydney. George Bass, who had already made a voyage along the coast in an open boat, having heard from the ship-wrecked sailors an account of their adventures, induced the Governor to provide him with a whale-boat, with a crew of six and provisions for six weeks, in order to carry on explorations. Having sailed along the coast as far as Wilson's Promontory without adventure, Bass was driven by a storm to seek shelter in Western Port, where he remained nearly a fortnight, making careful explorations. His provisions being nearly exhausted, he returned to Sydney without making any further discoveries on the southern coast, though he had established the fact that the Continent was separated from Van Diemen's Land by a strait, which the Governor named after its discoverer. In the year 1800, Lieutenant Grant, in H.M.S. "Lady Nelson," sighted the south-western coast of the Colony at Cape Northumberland, and left it at Cape Schank. He was, therefore, the first European to sail through Bass's Strait from the westward. In the following year he sailed from Sydney and explored the southern coast as far as Western Port, and cleared land and planted a garden on Churchill Island. In the month of December, 1802, Lieutenant John Murray, who had succeeded Grant in the command of the "Lady Nelson," reaped the first harvest from Victorian soil, and then sailed on to the mouth of a large inlet, into which he sent his first mate, Lieutenant Bowen, in a launch. Some days later, the brig herself entered the heads, and, after three weeks of exploration along the shores of the harbour, the territory was taken possession of in the name of the King, with the usual ceremonies, at Point Paterson.

On the 26th April, 1802, about three months after Lieutenant Murray's departure, Flinders, who was voyaging from England to Sydney, in the "Investigator," entered Port Phillip, but did not make any extended survey of the inlet. Acting on the favourable recommendation of Flinders, Governor King urged the Home authorities to make a settlement on the shores of Port Phillip, and, in the meantime, despatched a surveyor and an officer to make a tour of the Bay, and

report upon its suitability for occupation. Their report, however, was wholly condemnatory of the country as a place of settlement; but before this adverse verdict could reach England, Lieutenant-Governor Collins had been sent out, bringing with him, in the "Calcutta" and the "Ocean," the nucleus of a small colony to form the station which Governor King had so earnestly recommended. When Collins arrived in Port Phillip Bay in 1803, he effected a landing at what is now known as Sorrento; but being impressed with all its defects and none of its advantages for purposes of settlement, he stayed only about four months. Then he weighed anchor and conveyed his little colony to the newly-formed station at Risdon, in Van Diemen's Land. During his stay, however, the first white child born on Victorian soil saw the light, the first death occurred, and the first marriage was solemnised. Then for some twenty years the interior of the Colony remained untrodden by the foot of a white man.

On the 16th December, 1824, Hume and Hovell, who had led an expedition overland from Lake George, in New South Wales, encamped on the site of the present city of Geelong. Two years later, in order to forestall French designs on the southern territory, a party was sent by sea from Sydney to form a station at Western Port; but this, too, was abandoned owing to the unfavourable reports of the leaders. The first serious attempt at settlement on Victorian soil was that of the brothers Henty, who established themselves at Portland Bay in 1834, with flocks, farm-servants, and agricultural implements, and were there found by Major Mitchell, in the course of his famous expedition through *Australia Felix*, as the explorer named the territory now known as Western Victoria.

The genuine colonisation of the Port Phillip district was effected in 1835 by two parties operating from Van Diemen's Land, the one being led by John Batman, a native of Parramatta, in New South Wales, and the other by John Pascoe Fawkner, a native of Launceston. Batman treated with some native chiefs for the transfer of 600,000 acres of land, and secured that area for trifling payments of flour, blankets, tomahawks, handkerchiefs, trinkets, etc.; but the claims of his company were disallowed by the Government at Sydney, and by the Home authorities; although the Batman Association was subsequently granted, by the Governor of New South Wales, the sum of £7,000 as compensation, in recognition of its assistance in the colonisation of the new territory. Batman was materially assisted in his transactions with the aborigines by a wild white man named William Buckley living among them. He had escaped from the expedition of Collins in 1803, during that leader's stay at Sorrento. At the time when Batman found him, Buckley was about 50 years of age. He had been a soldier, and was convicted for his share in a mutiny at Gibraltar. Batman arrived at the site of Melbourne towards the end of May, and Fawkner's party at the end of August, 1835; and they were speedily followed by other

settlers from Van Diemen's Land. Stockmen came overland from Sydney and the squattages near Lake George, and, before long, the downs and the valleys around Geelong and Melbourne were covered with the flocks and the herds of the new settlers.

In the month of September, 1836, the Port Phillip district was proclaimed open to settlement, and on the 29th of that month Captain Lonsdale arrived to assume later the position of Chief Magistrate. In the month of March of the succeeding year, the settlement was visited by Sir Richard Bourke, the Governor of New South Wales, and received from him its name of Melbourne; while the designations—Flinders, Collins, Bourke and Lonsdale—bestowed upon some of the principal streets, commemorate the early years of Australia's colonial history.

The first years of settlement were marked by steady progress. In 1839, the Secretary of State for the Colonies appointed Mr. Charles Joseph Latrobe Superintendent of the District of Port Phillip, an office carrying with it the authority and functions of a Lieutenant-Governor. Captain Lonsdale was appointed his secretary, and a Court of Justice was established, Mr. Justice Willis being the first resident Judge. In the beginning of the following year, Angus McMillan discovered, and partially explored, the large and fertile province of Gippsland, named in honour of Sir George Gipps, the new Governor of New South Wales. On his return journey, McMillan met Count Strzelecki setting forth on a similar expedition. The latter gentleman explored the Murray to its sources in the Australian Alps, discovered and named Mount Kosciusko, travelled thence in a south-westerly direction to Mount Tambo and the Omeo District, crossed the Great Dividing Range, and, heading for Western Port, crossed and named eight large rivers, and succeeded in opening up a magnificent country covering an area of 5,600 miles, with 2,000 square miles of coast ranges and 250 miles of sea-board. In the wake of the explorations of McMillan and Strzelecki, settlement rapidly followed; in fact, almost as soon as the travellers returned with accounts of their discoveries, adventurous spirits pushed forward to establish squattages in the wilds of Gippsland.

In 1842, Melbourne was incorporated, Henry Condell being its first mayor, and savings-banks were established in the new city. By an Act of the Imperial Parliament, passed in the same year, the inhabitants of the Port Phillip District were empowered to send six representatives to the Legislative Council of New South Wales. The first representative of Melbourne was also its first mayor, while of the five members elected to represent the voters outside the capital of the district, two—Mr. C. H. Ebden and Dr. Alexander Thomson—were settlers in Port Phillip; and three—the Rev. Dr. Lang, Dr. (afterwards Sir) Charles Nicholson, and Mr. Thomas Walker—belonged to Sydney. Some time previously, an agitation had been started among the people of the Colony for separation from New South Wales, and expression was given to this feeling by Dr. Lang, who moved a resolution affirming its necessity in the Legislative

Council of New South Wales on the 20th August, 1844. Dr. Lang's resolution was negatived by more than three to one. A petition from the residents of the Port Phillip District, praying for separation, was, in the same year, sent to England; and on the 11th February, 1846, a favourable answer was received in Melbourne, and the occasion was marked by a public banquet to Dr. Lang. Events now moved rapidly. On August 5th, 1850, Victoria, South Australia, and Tasmania were granted representative institutions by Imperial Statute; and when, on November 11th, the news arrived in Melbourne of the granting of separation from New South Wales, the rejoicing thereat continued for five days. On July 1st, 1851, Victoria was proclaimed a separate colony. On the 16th of the month Mr. Latrobe was appointed Lieutenant-Governor, Sir Charles Augustus Fitzroy, of New South Wales, being named about the same time as Governor-General of Australia; and on November 11th the first Victorian Legislature—of which two-thirds were elected members—met at Melbourne. In 1850, the year preceding separation, the year also prior to that in which gold was discovered, and only forty-eight years since its discovery by Lieutenant Murray, Port Phillip had a revenue of £230,000, its exports amounted to £760,000, and its population was over 76,000.

The beginning of the year 1851 brought ruin and desolation to many a home, and in the gruesome designation of "Black Thursday" there has been preserved the bitter memory of the 6th of February, when the hot blasts from the north swept with fury over the earth, carrying with them flame and death. We are told by an eye-witness that the conflagration was terrible in its completeness; men, women, and children, sheep and cattle, birds and snakes, fled commingled before the fire in one common panic. For hundreds of miles the country was wrapped in flames; the most fertile districts were swept clean, flocks and herds were abandoned, and the entire population rushed in terrified hordes for their lives. The ashes from the forests on fire at Macedon, 46 miles distant, littered the streets of Melbourne.

Four months afterwards it was announced in the *Port Phillip Gazette* that gold had been discovered in the Henty Ranges. On the 9th June, 1851, the Gold Discovery Committee was formed in Melbourne; on the following day Mr. William Campbell, a settler on the Loddon, found some specks of the precious metal in quartz upon the station of Mr. Donald Cameron, at Clunes. Then the excitement spread and grew. On July the 5th a discovery of gold was reported at Anderson's Creek; on August 8th gold was found at Buninyong; on September the 8th, at Ballarat; and on December the 10th at Bendigo. The simultaneousness and magnitude of these discoveries were perfectly startling. The simplest appliances and the labour of only a few hours appeared quite sufficient, to the overwrought imagination of the early gold-hunters, to secure a fabulous fortune, transcending the visions of romance. All classes and all distinctions were levelled,

the thirst for gold seizing upon the entire community. The shops were empty, the streets deserted, the doors of the counting-houses barred, the plough left rusting in the furrow, sheep and cattle wandered untended, while the port of Melbourne was filled with unmanned vessels, dropping to pieces for lack of attention or repair. But in the valleys, and all along the creek courses of Clunes, Buninyong, and the Loddon River, and in many other auriferous places around, thousands of men swarmed, and the roads from the port to the fields were crowded with the eager gold-seekers. Trade soon, however, began to revive, and brisk business was done by the gold-buyers and lodging-housekeepers in the city; by the carriers, who found freightage at £80 per ton from Melbourne to Bendigo to pay as well as gold-digging on the fields; by saloon proprietors and the shanty and dancing-hall keepers, who became the veritable "first robbers" of fortunate diggers. The public service was, however, reduced to abject inefficiency; the police decamped, like their superiors, in search of fortune; and even domestic servants, male and female, joined in the general stampede. The Governor was reduced to a condition of absolute powerlessness, and ruled in Melbourne with pathetic loneliness with hardly any to obey his behests—like a monarch without a realm. Society was, in truth, utterly disorganised, and then matters began to become even more embarrassing. The news reached China, America, Europe, besides the neighbouring colonies, and at the port of debarkation up sprang "Canvas Town," formed by the myriad tents of the new arrivals. From South Australia and Van Diemen's Land, without reckoning the other colonies, something like 11,000 people poured into Melbourne, bound for the fields, in the latter half of the year 1851. Moreover, the supply of gold appeared inexhaustible. Before the end of the month of December in the year of its discovery (1851), upwards of 10 tons of the metal had been obtained from the Victorian fields; and it is interesting to note here that nearly one-third of the world's annual production of gold is raised in the Australasian Colonies, and of these Victoria, down to 1897, retained the first position; while the colony's total yield since the first discovery up to the end of the year 1899 was 65,000,000 oz., valued at about 257 millions sterling.

The arrivals from Europe in the early days included, not only what has been picturesquely described by an Australian writer as the "brain and brawn of the Old World," but also many that could have been easily spared, viz., fugitives from justice, adventurers from California and the South Pacific, escaped convicts and disguised bushrangers, sharpers and professional gamblers from every city on the "Continent" or in the "States," and hordes of Asiatics from Canton and the Straits Settlements, there being not less than 25,000 Chinese whom the gold fever allured to the various fields. Week after week, and month after month, vessels filed into Hobson's Bay, landing passengers and discharging cargoes in the most primitive fashion, for their crews deserted as soon as the ships dropped anchor or came to their moorings. The

nobly-born and the gently-nurtured, professional men and navvies, artisans, farm-labourers, deserting soldiers and runaway sailors, "forty-niners" from the fields of California, political refugees from France and Germany and Russia—representatives, in short, of every civilised and almost every uncivilised people beneath the sun—poured, in never-ending stream, into Port Phillip, *en route* for the gold-fields. Upwards of 15,000 immigrants arrived by sea during the latter half of 1851, 94,000 during the year following, and in 1853-4-5, nearly a quarter of a million. The gold yield from the Victorian fields reached its maximum only two years after its discovery, when the return of production during twelve months represented a value of £12,600,000. The value of the gold raised from 1852 to 1860 inclusive was upwards of £95,000,000; while the population of the colony in the latter year was little over half a million. The palmy days of gold-hunting represented a period of about a decade, and most of the great prizes were won in the early days of the history of the industry. The first large nugget (weighing 1,620 oz.) was found in Canadian Gully, Ballarat, in February, 1853. Another, found on Bakery Hill, in the same district, in June, 1858, weighed 2,217 oz. Men mining at Golden Point, Ballarat, each made from £300 to £400 sterling per day. The Governor, who visited this part of the field in 1851, says that he saw 8 lb. weight of gold washed from two dishes of dirt. He heard also of a party which had raised, at an early hour of the day, gold weighing 16 lb.; and the same party had succeeded in obtaining 31 lb. in weight before nightfall. But though the prizes were great, the failures were many; and numbers of the disappointed and disillusioned were glad to return to their former callings, or turn their hands to the employments that the conditions of the diggers' life called into being. Wages rose phenomenally, and carpenters and blacksmiths found constant work, and fierce competition among employers for their labour, at £1 and £1 5s. a day. Cartage from the seaport was excessive, amounting in the case of some fields to as much as £100 sterling per ton; and it is said that a publican, who controlled no less than 120 drinking shanties, disbursed as much as £1,500 a week in the conveyance of goods from Melbourne, for seven consecutive months, in the year 1853.

A noteworthy incident of the period was the robbery of the ship "*Nelson*," lying in Hobson's Bay, by a gang of desperadoes (probably escaped convicts from across the straits), who boarded the vessel and carried off gold-dust, valued at some £24,000 or £25,000 sterling. The criminal element in the community found exercise for their talents also in "sticking-up" and robbing the gold escorts on their way to the capital, sometimes killing the armed officials who formed the guard, though such bushranging exploits were much more common in the early gold-fever days of the neighbouring Colony of New South Wales.

Governor Latrobe was succeeded by Sir Charles Hotham, R.N., who arrived in Melbourne in the month of June, 1854. This official

has been described as one who attempted to govern a free colony as he would the quarter-deck, and who, though possessed of many fine qualities, was totally lacking in the great essential of tact. He came to Victoria in a time of administrative trouble and embarrassment. The separation of the Port Phillip district from the Colony of New South Wales had been attended by the creation of a Legislative Council, composed of ten nominee and twenty elected members. Among the latter there were, however, no representatives of the great bulk of the people who had been attracted to the gold-fields. One of the first acts of the Council was the imposition of a license-fee of £1 10s. per month—which had for a time been raised to £3—exacted from every person searching for gold, the license not being transferable, and available only within a half-a-mile of the police head-quarters whence it had been issued. Moreover, whenever it was demanded from a digger by a police officer, the license had instantly to be produced; and this proved an excessively galling condition. Digger-hunting by the young cadets in the Government service was frequently indulged in with unnecessary harshness, and the spectacle of some fifty or sixty handcuffed together was no uncommon thing. Everyone engaged in searching for gold who had neglected to procure or to renew, or who had lost or mislaid his license, was a subject for legal treatment; and the action of the authorities occasioned tremendous heart-burning. This culminated in an agitation for the suppression of the license-fee, which began at Bendigo, in 1853, and quickly spread to the other gold-fields. The Government met this manifestation of popular indignation, in 1854, by the issue of an order directing the police to devote two whole days a week to the hunting down of unlicensed diggers; and then the smouldering embers of rebellion broke into flame.

A digger named Scobie had been killed in a scuffle at an hotel in Ballarat kept by a man named Bentley, and the man's comrades believed the latter to be concerned in what they considered to be murder. The Police Magistrate, before whom Bentley was brought, acquitted him, and indignation meetings were immediately held. At one of these the hotel which had figured in the trouble was burnt to the ground, its owner only escaping by flight on horseback. For this act of incendiarism three men were arrested, not one of whom, it was alleged, was concerned in the affair; and a public meeting was held, at which resolutions were carried demanding their immediate release, affirming at the same time the right of the people to the exercise of political power. However, the three prisoners were taken to Melbourne, and each was sentenced to a short term of imprisonment. Again did the diggers demand their release, and again were they refused. Their attitude, however, was ominous, and two detachments of infantry were sent up to Ballarat from Melbourne. They arrived on the 29th of November, 1854, and were attacked by the diggers, who followed them to their bivouac. This brought about a sortie by the

police, who drove the assailants of the military back. Two days afterwards there followed another digger-hunt, and the soldiers were called from quarters to support the constabulary. The diggers resisted and organised themselves for an armed defence, electing the late Hon. Peter Lalor as their leader, and entrenching themselves behind a stockade in Eureka-street—since known as the Eureka Stockade. On the 3rd December the soldiers and police, consisting of 276 men, and including cavalry, advanced on the entrenchment to attack the recalcitrant diggers. The insurgents made a gallant defence, but, after several volleys had been fired on both sides, the Stockade was carried at the point of the bayonet, and the diggers were dispersed. During the engagement, which lasted about a quarter-of-an-hour, Captain Wise, of the 40th Regiment, was mortally wounded ; about thirty of the diggers were killed, and 125 were taken prisoners ; while of the soldiers, four were killed, and many were wounded. All the tents within the Stockade were burnt down ; the district was placed under martial law, and the prisoners were conveyed to Melbourne. On the 1st April, 1855, they were arraigned on a charge of high treason in the Supreme Court, though three of the leaders in the outbreak—Messrs. Lalor, Vern, and Black—succeeded in evading capture. Public sympathy with the insurgents ran, however, so high, that no jury could be empannelled to convict them. Their defence was voluntarily undertaken by several leading barristers, and their acquittal was secured. An amnesty was then proclaimed ; and the causes which led to the outbreak were removed. A commission of inquiry subsequently recommended the introduction of constitutional government on a representative system, based on a liberal franchise. On the 23rd November, 1855, the new Constitution, which had been prepared by the existing Legislature, and had received the sanction of the Imperial Parliament, was proclaimed. It established Responsible Government, with popular representation and two Chambers, both elective ; and when the first Cabinet, with Mr. Haines as Premier, took office, the district of Ballarat was represented in Parliament by Messrs. Lalor and Humffray, both of whom were concerned in the armed resistance to authority at the storming of the Eureka Stockade. The former became, in course of time, and remained for years, Speaker of the Legislative Assembly.

The mental worry and distress attending the administration of the colony, proved too much for Sir Charles Hotham, and he succumbed to a severe illness at the close of the year 1855, the administration of the Government devolving upon Major-General Macarthur until the arrival of the next Governor.

Sir Henry Barkly, who had been appointed to succeed Sir Charles Hotham, did not arrive in the Colony until the 23rd December, 1856. Some few months after he assumed office, his wife, who had become very popular, died of injuries received in a carriage accident, the peculiarly sad circumstances surrounding the unfortunate event exciting the deepest sympathy from all classes of the community.

At the end of the year 1857, the Philosophical Institution took up the question of the exploration of the interior of the Continent, and appointed a committee to inquire into and report upon the subject. In September, 1858, and as soon as it had become known in Victoria that John McDouall Stuart had succeeded in penetrating as far as the centre of Australia, the sum of £1,000 was anonymously offered for the prosecution of exploration, on condition that a further sum of £2,000 were subscribed within a twelvemonth. The amount having been raised within the time specified, the Victorian Parliament supplemented it by a vote of £6,000, and an expedition was organised, under the leadership of Robert O'Hara Burke, with W. J. Wills as surveyor. The promotion of this exploratory scheme was merely a matter of emulation between Victoria and South Australia as to which colony should be first to cross the Continent from sea to sea. The undertaking was planned upon a large scale, and no pains were spared to secure success. The expedition, however, ended in disaster; its leaders—Robert O'Hara Burke, W. J. Wills, and an assistant named Gray—lost their lives. No one can deny the heroism of the men whose lives were sacrificed in this ill-starred undertaking; but it is admitted that the leaders were not bushmen, and had no experience in exploration. Disunion and disobedience to orders, from the highest to the lowest, brought about the worst results, and all that now remains to tell the story of the failure of the undertaking is a monument to the memory of the explorers, from the chisel of the late Charles Summers, erected on a prominent site in Melbourne. The anxiety of the Exploration Committee of the Royal Society, and of the Australian public, regarding the fate of Burke and Wills, led to the despatch of several relief expeditions by Victoria, Queensland, and South Australia. That sent out by Victoria was led by Alfred W. Howitt, a son of William and Mary Howitt, and resulted in the finding of John King, camel-driver to the Burke and Wills expedition, and sole survivor of the four who had crossed the Continent. Howitt was again sent out, shortly after his return with King to Melbourne, to disinter and bring back the bodies of Burke and Wills, which received a public funeral on the 28th December, 1862—one of the most impressive spectacles ever witnessed in the capital of Victoria.

During the seven years in which Sir Henry Barkly held office, some radical changes were made by the Legislature, not only in its own constitution, but also in the laws of the Colony. Manhood suffrage and vote by ballot were instituted, and the property qualification for Members of the Assembly was abolished. Large areas of land were thrown open for selection, the maximum area for each selector being fixed at 640 acres, and State aid to religion was abolished.

In March, 1863, an Intercolonial Conference was held in Melbourne to discuss the existing tariffs and various other matters of intercolonial concern. The suggestion which led to the meeting was

made by Sir Dominic Daly, Governor of South Australia, and delegates from all the colonies, with the exception of Western Australia and Queensland, were present. The reasons urged by those colonies for not sending delegates were, that the former was precluded by its geographical position from entering into any arrangement that the colony would be likely to agree to, and that in the latter no Parliamentary authority had been given for the holding of such a conference.

The Conference discussed the tariff, and questions of a kindred character, including drawbacks and *ad valorem* duties; inland intercolonial Customs duties and their distribution; transportation from the United Kingdom to the Australian possessions; a permanent immigration fund, to be provided by Act by each Colony, upon an equitable basis; improvement of internal rivers in Australia for purposes of navigation and irrigation; coastal lighthouses, and other maritime questions affecting the shipping interest; fortnightly ocean-postal communication; Anglo-Australian and China telegraph; legal questions, including the law of bankruptcy, of patents, of joint-stock companies, of probates and letters of administration; a Court of Appeal for the Australian Colonies; and a uniform system of weights and measures. Concerning the tariff and kindred subjects, the following resolutions were passed:—"That the basis of a uniform tariff should be determined for the Australian Colonies, and also for Tasmania; that the *ad valorem* mode of levying duties upon goods was open to many objections, and that it ought not to be continued; and that the following tariff be adopted by the Conference:—Spirits (imported), 10s. per gallon; wine, in wood, 2s. per gallon; ditto in bottle, reputed quarts, 8s. per dozen; ditto, ditto, ditto, pints, 4s. ditto; ale, porter, and beer, in wood, 6d. per gallon; ditto, ditto, ditto in bottle, reputed quarts, 1s. per dozen; ale, porter, and beer, in bottle, reputed pints, 6d. per dozen; malt, 6d. per bushel; hops, 3d. per lb.; tobacco, manufactured, 2s. per lb.; ditto unmanufactured, 1s. per lb.; ditto sheepwash, 3d. per lb.; cigars and snuff, 4s. per lb.; tea, 6d. per lb.; sugar, refined and candy, 7s. per cwt.; ditto unrefined, 5s. 6d. per cwt.; molasses and treacle, 3s. 6d. per cwt.; coffee, chicory, cocoa, and chocolate, 3d. per lb.; opium, manufactured, 20s. per lb.; ditto, unmanufactured, 10s. per lb.; rice, 4s. per cwt.; dried fruit, nuts, and almonds, 10s. per cwt.; candles, 1d. per lb.; oils, whether of natural or artificial origin, and fluids used for burning or lighting purposes, 6d. per gallon; and salt, 40s. per ton." It was further resolved that the members of the Conference should undertake to urge upon their respective Parliaments the adoption of such tariff; that the tariff which had been agreed upon, after the fullest deliberation, ought not to be altered by any one colony, nor until after the proposed alteration should have been considered in a future Conference; and that drawbacks should be allowed on the following articles, viz.: wines, hops, tea, sugar, rice, coffee, chicory, cocoa, and chocolate.

On intercolonial Customs duties and their distribution, it was resolved that Customs duties ought to be paid to the revenues of those colonies by whose population the dutiable articles were consumed; and that the colonies of New South Wales, Victoria, and South Australia ought to co-operate with each other to secure to each Colony the revenue to which it was legally entitled, either by the distribution of the Customs revenues collected by all at stated periods ratably, according to their population, or by some other mode which might be considered equitable and practical.

As to transportation, it was resolved that a committee, consisting of Messrs. Cowper, O'Shannassy, Meredith, and Blyth, should prepare an address to Her Majesty, which address was afterwards adopted. It set forth that the appointment of a Royal Commission to inquire into the subject of transportation had caused apprehensions in the minds of the inhabitants of the Australian Colonies lest some portion of their territory might be selected as a site for a new penal settlement. The address, after reviewing the experience of the colonies, protested against the system, and implored Her Majesty to refuse her sanction to any proposal for reviving transportation to any part of her Australian possessions. It was further resolved that four copies of the address should be engrossed, for transmission to Her Majesty severally by the Governors of the colonies represented.

As to immigration, it was resolved that it was of the highest importance to the prosperity and future greatness of Australia that a healthy flow of immigration should be encouraged and promoted, chiefly from the United Kingdom; and that, in pursuance of a common interest, the Legislatures should severally make provision (as had been done by some) for permanent legal appropriation, so that they might accomplish this object. Further, that the decision arrived at with regard to any alteration in the tariff should apply with equal force to that affecting the immigration policy.

As to improvements to the rivers in the interior, it was resolved that the obligation of carrying into effect the necessary works for rendering navigable the great rivers of the interior should primarily devolve upon the respective Governments having jurisdiction over those rivers.

As to lighthouses and maritime objects, it was resolved that legislative action should be taken by the colonies represented, to prohibit vessels proceeding to sea from any port in the colonies unless under the command of masters holding certificates of competency. It was also resolved to make provision for granting certificates by competent authority, to ensure necessary qualifications; and to make uniform provision upon the subjects of salvage, buoyage, and the management of lifeboats. Further, that the system of maintaining coast lighthouses should be reconsidered, and that a joint commission should be appointed to consider and report generally upon the entire subject.

As to fortnightly postal communication with England, it was resolved that it was inexpedient, in the present state of the question, to consider the proposal for the adoption of a fortnightly postal service with the United Kingdom *viâ* Suez.

As to electric telegraph communication with England, it was resolved that it was not then expedient to discuss the proposals brought under consideration with reference to the projected Anglo-Australian, Indian, and China Electric Telegraph.

As to legal questions, it was resolved, *inter alia*, that it was desirable that the bankruptcy laws should be assimilated; and that a uniform system of weights and measures should prevail throughout the Australian Colonies.

Sir Henry Barkly's successor was Sir Charles H. Darling, who governed Victoria during an exceedingly troubled and contentious administration—from 1863 to 1866. The interval between these years represents a period of angry and protracted conflict between the partisans of the opposed fiscal policies of Protection and Freetrade. The cause of the former was espoused by a large majority of the people and of the Legislative Assembly, while that of the latter found vehement adherents in a large, influential, and wealthy minority of the inhabitants of the Colony and in the Legislative Council. A Bill imposing numerous Customs duties of a protective character passed the Lower House, and was rejected by the Upper. The Measure was then tacked on to the Appropriation Bill, and the Council again threw it out. The Government then proceeded to collect the duties on the authority of the Lower Chamber alone; and, as funds were not available for the payment of the Public Service, the Governor gave his approval, and the Executive Council borrowed money from one of the banks, confessing judgment as soon as the loan reached £40,000. The Supreme Court of the Colony pronounced the collection of Customs duties on a mere resolution of the Legislative Assembly to be illegal; and, in another session, the Tariff Bill, severed from the Appropriation Bill, was again passed by the Lower House, and again the Council threw it out. This was followed by a dissolution, and the new Legislative Assembly contained fifty-eight Protectionists to twenty Freetraders; and a third time the measure was passed, and a third time rejected by the Council. The Ministry had no option but to resign, upon which the leader of the Opposition, Mr. Fellows, formed an Administration, but Sir Charles Darling would neither see the Chief Secretary nor grant him a dissolution. Meanwhile the salaries and wages of every person in Government service had fallen into ten weeks arrears. Then Sir James McCulloch, the late Chief Secretary, returned to office, and a third session of Parliament was held in which the Tariff Bill was passed in all its stages, and sent up to Council with a preamble asserting the absolute and exclusive right of the Legislative Assembly to grant supplies. The Upper House objected to this, as being inconsistent

with the letter, as well as the spirit of the Constitution Act, and a conference was agreed upon; and the obnoxious portions of the preamble having been withdrawn, the measure passed through all its stages, as did also the Supply Bill, and the deadlock was removed. The conclusion of the crisis was precipitated by the recall of the Governor, on the ground that he had not maintained that strict neutrality during the political crisis which, as a constitutional administrator, it was incumbent on him to observe. His departure was made the occasion, on the part of his political friends, of a great public demonstration. Subsequently, also, the Legislative Assembly voted £20,000 of the public money to Lady Darling, as a *solatium* for her husband's recall. The Bill for the appropriation of what is historically known as the "Lady Darling Grant" did not, however, meet with the approval of the Upper House. A futile attempt was made by the Assembly to force the measure through the Upper House by means of a "tack," and this brought about another deadlock. At this juncture, news arrived from England of the death of the late Governor; and on the motion of Mr. Fellows, an annuity was voted to Lady Darling, all parties generously concurring, and thus averting a second crisis in the political conflict, the course of which was coeval with Sir Charles Darling's sojourn in the colony.

The Right Hon. J. H. T. Manners-Sutton (afterwards, by the death of his father, Viscount Canterbury) assumed the reins of Government on the 13th August, 1866, and held office until the 2nd March, 1873. During his term of administration there were no less than six changes of Ministry in less than seven years; but these do not seem to have affected the general prosperity of the colony. The fiscal policy of the country had been settled; there was a subsidence in the fury of party warfare; the revenue was on the ascendant grade; manufacturing enterprise experienced great expansion; the railway system of the province was being steadily developed, and things trended on the whole towards progress. In the months of June and July, 1870, an Intercolonial Conference met in Melbourne, at which representatives from the colonies of New South Wales, Victoria, and South Australia were present. The most important questions considered by the Conference, as set forth in the Report, were:—A free interchange of the natural products and manufactures of the respective Colonies, a uniform tariff, a Custom's Union, and a distribution of the revenue derived therefrom upon the basis of population. The delegates from the different colonies were, however, unable to fix a basis of agreement with regard to a list of articles involving freetrade on the one hand, and discriminating duties on the other; though they were in perfect accord upon several other questions of considerable importance. Despatches from the Imperial Government having intimated the intended withdrawal of the troops stationed in Australia, the Conference took into consideration the course to be pursued under the altered circumstances in which the colonies were about to be placed, and it

was decided to press upon the attention of Her Majesty's Government the necessity of making adequate naval provision for the protection of British and Australian commerce in Australian waters, especially in time of war. Resolutions were also agreed to on the following subjects :—

The adoption of the necessary steps for securing the withdrawal of the large amount of worn and deteriorated silver coinage circulating in the Australian Colonies.

The establishment of a British Protectorate over the Fiji Islands.

The calling of the Peninsular and Oriental Company's steamers at the port of Kangaroo Island, in South Australia.

Telegraphic communication with Port Darwin, and with the Gulf of Carpentaria.

The proposed new schemes of ocean, postal, and passenger service.

The relief of distressed colonists and seamen in foreign ports.

The compilation of the statistical records of the several Colonies upon a uniform method.

The Conference also expressed an opinion that the respective Governments should exert their influence with a view to the introduction of the decimal system of weights.

Perhaps the most noteworthy measure of the period was the Education Act drafted by Mr. Wilberforce Stephen, which came into force on the 1st January, 1873, and which provided free, compulsory, and secular education up to a fixed standard. During the first twelve years of its operation, there was an increase of 72 per cent. on the number of schools opened, of 74 per cent. in the number of instructors, of 63 per cent. in that of the scholars on the rolls, of 76 per cent. in their average attendance and in the estimated number of distinct children in attendance.

During Viscount Canterbury's administration the Duke of Edinburgh visited Victoria, and received an enthusiastic welcome. His public acts during his sojourn in the Colony were the laying of the first stone of the Town Hall, in Swanson-street, and of the fine hospital on St. Kilda-road that bears his name.

Viscount Canterbury was succeeded by Sir George Ferguson Bowen, who had served as Queensland's first Governor, and whose tenure of office in Victoria was marked by a renewal of the political turmoil which had characterised the administration of Governor Darling. The old antagonism between the two Chambers broke out with redoubled vehemence ; and they joined vigorous issue on the subject of payment of members. On two occasions the Upper House had passed a specific measure, authorising payment of members, to be operative for three years ; but at the

beginning of the third session of Parliament, in 1877, a new Ministry, at the head of which was Mr. Graham Berry, backed by a powerful majority in the Assembly, declared that the item should in future be tacked on to the Appropriation Bill. This course was adopted, and the Council set the Bill aside. The consequence was that there were no funds to pay the servants of the Government, and on the 8th of January, 1873, a date henceforth known in the history of the colony as "Black Wednesday," a notice appeared in the *Government Gazette* dismissing all heads of Departments, the Judges of Country Courts, Courts of Mines and Insolvency, Police Magistrates, Crown Prosecutors, and members of other public offices. The proceeding was universally denounced as "revolutionary," and the effect on public confidence was disastrous in the extreme. There was an immediate shrinkage in property values, commerce was suddenly paralysed, and a considerable exodus to New South Wales, both of capital and labour, set in. The Upper House thereupon passed two Bills—one a separate measure dealing with the payment of Members; the other an Appropriation Bill with the obnoxious "tack" omitted. Shortly afterwards, the Lower Chamber introduced a Bill adopting the principle of the referendum, and thus depriving the Upper House of most of its power as a co-ordinate branch of the Legislature. Of course, this was thrown out by the Council; and the Assembly then voted a sum of £5,000 to enable the Premier and a colleague, Professor C. H. Pearson, to proceed to England in order to lay the case before the Secretary of State for the Colonies. This precipitated matters. On the 4th December, 1878, Sir George Ferguson Bowen received a despatch recalling him to England.

On the 27th February, 1879, the Marquis of Normanby arrived. He was regarded by the Home Authorities as a safer administrator in time of political crisis than his predecessor. Meanwhile, Messrs. Berry and Pearson had arrived in England to seek Imperial aid in Victoria's constitutional difficulties. They were kindly received by Sir Michael Hicks-Beach, then at the head of the Colonial Office, and were given a great deal of excellent counsel. The Secretary of State for the Colonies signified that, in his opinion, no sufficient case for the intervention of the British Parliament had been made out. The right of self-government had been given to the Colony of Victoria, and it was incumbent on her to work out her own constitutional problems. He counselled the Legislative Assembly not to introduce elements foreign to the tenor of Bills of Supply, and he considered that the Council would not then be likely to reject them. The despatch (which was shown to Messrs. Berry and Pearson before its transmission to the Governor) concluded by stating that the Imperial Parliament would never alter the Constitution of the Colony at the instance of only one House. This wise course of action on the part of the Colonial Office mitigated a political conflict which has never since been revived to the same extent.

Almost contemporaneously with the assumption by the Marquis of Normanby of the Government of the Colony occurred the capture, after a protracted siege in an hotel at Glenrowan, of the notorious band of armed highwaymen, known to the annals of crime as the "Kelly Gang." The career of these outlaws is one of the most marvellous in the history of modern times, and certainly transcends that of any other association of a like nature in the history of bushranging in Australia. The "Gang" originally consisted of Edward and Daniel Kelly, Isaiah (or Wild) Wright, the brothers Quinn, and the brothers Lloyd. They established themselves in the ranges lying between Greta and the King River, from which they issued forth to prey upon the settlers in the surrounding country, receiving assistance and being aided in their concealment by numerous friends and neighbours who were, like themselves, horse-thieves and cattle-lifters. A fairly large reward having been offered for their capture, four mounted troopers of the Victorian Police Force, namely, Sergeant Michael Kennedy, Thomas Lonigan, Michael Scanlan, and Thomas McIntyre, set forth in pursuit, and encamped on the Stringybark Creek, about 20 miles from the town of Mansfield. Here one of them incautiously betrayed his presence by firing at some parrots. In the evening of the 26th October, 1878, as McIntyre and Lonigan were engaged in making tea, Kennedy and Scanlon being at the time absent, four armed men, two of whom were recognised as the brothers Kelly, suddenly made their appearance, and commanded the police to throw up their hands. McIntyre having no weapons with him, complied; but Lonigan drew his revolver, and was immediately shot dead by Edward Kelly. Presently the outlaw and his associates, hearing Scanlan and Kennedy approaching, concealed themselves behind some logs, and, covering McIntyre with a rifle, gave him the option of silence or instant death. Kennedy was commanded to throw up his hands. He did not do so, and was immediately fired at. He dismounted at this, and sought cover behind a tree; but before he could unsling his rifle he was shot dead, and Scanlan shortly afterwards met a similar fate. In the meantime McIntyre had mounted his horse, and dashed down the creek, followed by several bullets, which did not, however, touch him, though his horse must have been hit, for it soon gave in and had to be abandoned. As soon as darkness set in, McIntyre took off his boots, in order to make no noise, and on the afternoon of the second day succeeded in reaching a place of refuge, from which he was conveyed to Mansfield. The bodies of the three murdered policemen were afterwards discovered and interred with honour; and a marble monument, erected to their memory by public subscription, stands at the intersection of two of the principal streets of the town of Mansfield. After the outrage just detailed, the assassins betook themselves to the recesses in the ranges, where Superintendent Nicholson, who had already distinguished himself by his gallant capture of the bushranger Power, drew a cordon round the outlaws, by which they were cut off from all supplies, and were forced a few weeks

afterwards to make a break for the open. In doing so they captured the homestead of a squatting station and locked up the inmates ; and then, two hours afterwards, they made a descent upon Euroa. Before entering the town, and at a distance of 4 miles from it, they cut the telegraph wires, and stationed a guard to keep watch. Arrived at Euroa, "Ned" Kelly and an accomplice named Stephen Hart, entered the National Bank, and the leader of the "Gang," presenting a revolver at the head of the accountant, entered the manager's room, threatened to shoot him if he as much as stirred, made prisoners of the latter, his wife, his mother, his seven children, two servants, the accountant, and the clerk, and then calmly proceeded to ransack the bank, which contained about £2,000 in notes and cash. They then conveyed the plunder and the whole of the prisoners in a buggy, a spring cart, and a baker's light waggon, to the squatting station previously referred to, where no less than twenty-two persons, who had been placed under restraint, were being guarded by a man named Byrne, a fourth member of the marauding band. Finally, at about half-past 7 in the evening, the whole of the prisoners were placed in a hut, and warned not to stir from it at the peril of their lives, until 11 o'clock. The four outlaws, all of whom were well-mounted, then rode off with the money they had obtained, and disappeared again for weeks. Meanwhile the Victorian Legislature passed a special Act of Parliament, by which the bushrangers and their numerous confederates and helpers were declared outlaws. Under the provisions of this measure, twenty-one accomplices were arrested, while £8,000 were offered for the apprehension of the "Gang," and black-trackers were imported from Queensland to discover and follow their trail. Suddenly, and without warning, they appeared at Jerilderie, in New South Wales, and plundered the bank there, on the 8th of February, 1879. In the month of June, in the year following, a free selector named Skerritt was shot in his hut at Sebastopol, near Beechworth, by "Joe" Byrne. On the 28th of the same month, a detachment of police was sent from Melbourne by special train to Glenrowan, a railway station 40 miles north of Euroa, and reinforcements from Benalla, Beechworth, and Wangaratta brought the force up to thirty. Kelly's party had torn up the rails about a mile and a half beyond Glenrowan, and had taken up a defensive position in a public-house upon which the police opened fire. Suddenly, and to their great surprise, they were attacked from the rear by a man clad in a suit of armour. This was "Ned" Kelly, the outlaw leader. Shots were exchanged between him and the police, and wounded in his arms and legs, which were not armoured, he was seized and disarmed. The siege was maintained throughout the night, and Byrne was shot at about 5 in the morning. At 10, while "Dan" Kelly and "Steve" Hart were defending the back of the premises, thirty men, all of whom had been made prisoners by the bushrangers, rushed out of the front door of the public-house and threw themselves flat upon the ground. A little after 3 in the afternoon, the police set

fire to the house, and the two surviving outlaws perished in the flames. An old man named Cherry, who had been dangerously wounded by one of the "Gang," was rescued from an out-house in an insensible condition, and expired shortly afterwards. "Ned" Kelly was in due course tried, convicted, and hanged. It transpired in the evidence that during his career he had stolen upwards of 200 horses, and that an expenditure of no less than £50,000 sterling had to be incurred before he could be brought to justice.

On the 1st October, 1880, the first Melbourne International Exhibition was opened by the Marquis of Normanby. It closed in May, 1881, and during the seven months it remained open the admission of all classes numbered 1,900,496, and the receipts amounted to £50,000. There had previously been five industrial exhibitions in Melbourne. The first two (those of 1854 and 1861) had been of a purely local character; the others, held in 1866, 1872, and 1875 respectively, were intercolonial.

During the administration of the Marquis of Normanby a measure was passed which effected an important reform in the Constitution of the Legislative Council. It increased the number of Members from thirty to forty-two, lowered the property qualification required from them, shortened the tenure of their seats, and widened the electoral basis upon which that House rests; any person rated on a freehold of the annual value of £10, or a leasehold of the annual value of £25, being entitled to exercise the franchise for the Legislative Council. In July of the same year the third Berry Ministry was overthrown, and this led to the advent to power of Sir Bryan O'Loghlen.

The O'Loghlen Ministry lost their position in March, 1893, but they held office long enough to enable the embittered feelings engendered by the political warfare of previous years to subside, and an entirely different tone began to pervade political life. A renewed feeling of confidence arose in the public mind, when, on the fall of the O'Loghlen Cabinet, a coalition Ministry was formed under Mr. James Service, comprising the leading men of both sides of the Assembly. The two great Acts of the Service Administration were the abolition of the political control of the Government railways and the abolition of patronage in the Public Service. The railways were placed under the management of three independent Commissioners, and the Act doing away with patronage in the Public Service in regard to appointments and promotions, substituted what the Act itself termed "a great and equitable system in lieu thereof, which will enable all persons who have qualified themselves in that behalf to enter the Public Service without favour or recommendation other than their own merits and fitness for the position aspired to."

On the 9th December, 1885, the Victorian Parliament adopted the Imperial Act constituting a Federal Council of Australasia, and Victorian representatives attended the first meeting of the Council, which opened in Hobart on the 25th January, 1886.

The year 1886 and the following years were somewhat uneventful. The colony was busily engaged expanding its railway system, and pursuing what is known in Australia as a vigorous policy of public works. The Service Ministry was followed in February, 1886, by that of Mr. Duncan Gillies, which lasted 1,722 days, and was, next to that of the MacCulloch Ministry (1863-68), the most long-lived of Victorian Administrations, although both the MacCulloch and the Gillies Ministries have been since surpassed by the administration of Sir George Turner. The second Victorian International Exhibition was opened in Melbourne in 1888, and was highly successful. During the same year the number of members of the Legislative Council was increased to forty eight, and of the Assembly to ninety-five. The boundaries of the electoral districts of the Assembly were altered, and the number of districts increased to eighty-four, so that, with a few exceptions, only one Member should be returned by each constituency. During 1888 Victoria touched its highest point of prosperity, and, judged by the inflow of population, was more attractive to the immigrant from Europe than any other province of Australasia. Population still flowed to the colony during the three following years, but in greatly diminished numbers.

In 1890 there met in Melbourne a conference of delegates from all the provinces to consider the question of Australasian union; it was unanimously agreed that the best interests of the colonies would be promoted by their early union, and the Legislatures of the respective colonies were invited to appoint delegates to a National Convention to report upon a scheme for a Federal Constitution. Agreeably with the resolutions of the Conference, all the provinces appointed delegates to a Convention held in Sydney. The history of this and subsequent Conferences belongs more properly to the history of Australia as a whole than to Victoria, and will be found elsewhere in these pages.

On the 5th November, 1890, Mr. Duncan Gillies ceased to be Premier, and was succeeded by Mr. James Munro, who in turn gave place, in February, 1892, to Mr. Shiels. One of the earliest acts of the new Government was to suspend the Railway Commissioners. The Commissioners were appointed under the Act passed in 1884 to administer the service on business lines, and whatever may have been the contributing causes, their administration was not successful, and the Government considered that the best way to meet the case was to relieve the Commissioners of their functions. The Commissioners' suspension lasted from the 17th March till the 7th June, when these officers resigned. An interim arrangement was made by the Government appointing temporary Commissioners, and subsequently the law was altered to allow of the railway management being vested in one Commissioner.

In January, 1893, the Shiels Ministry was displaced by that of Mr. J. B. Patterson. In April of the same year there was an acute financial panic in Melbourne. Four of the banks and a number of

other financial institutions receiving deposits stopped payment, and business was entirely disorganised. The depositors kept drawing out their deposits even from institutions concerning whose solvency they appeared to have had no doubt; and the Government, in order to allow time to both the public and the banks to consider the position, proclaimed five bank holidays, viz., from the 1st to 5th May. Several of the banks paid no heed to the "moratorium," and conducted their business as usual. The action of the Government was without effect, as the run continued, and five other banks suspended payment. The crisis was the most severe trial ever experienced by the colony, and was met by the people of Victoria with unexampled courage. Most of the banks, and some of the financial institutions were reconstructed.

In 1895 an important advance was made towards the federal union of the Australasian colonies by the agreement of the Premiers to commit the duty of framing a Federal Constitution to a convention of delegates from the electors of the various Colonies. An "Enabling Act," to give effect to this decision, was passed by the Victorian Legislature in March, 1896, and the delegates to the Convention were elected on the 4th March of the following year. The referendum in regard to the Bill, drawn up by the Convention, was taken in Victoria on 3rd June, 1898, and the Bill was adopted by 100,520 votes in the affirmative to 22,099 in the negative, but as the Bill failed to obtain the statutory number of affirmative votes in New South Wales it could not be proceeded with. The Convention Bill was amended at a conference of Premiers, held in Melbourne at the end of January, 1899, and the original Bill, with the Premiers' amendments, was adopted by the Victorian electors on the 20th June, 1899. For the Bill 152,635 votes were cast, and against it 9,804.

Mr. J. B. Patterson's Ministry lasted from 23rd January, 1893, to 27th September, 1894, and was succeeded by that of Mr. (now Sir) George Turner, which continued in office till the 5th December, 1899, a longer period than any previous Ministry. Sir George Turner found the finances of the colony in a condition of disorganisation, and the chief care of the Ministry was to overtake the deficiency left by its predecessors and to keep the expenditure within the income; and in this it was successful. In 1893, the year preceding the accession to office of the Turner Ministry, the expenditure exceeded the revenue by £1,030,521; in 1894 the deficiency fell to £593,432, and in 1895 to £45,787; in 1896 it amounted to £81,500; but in 1897 and 1898 the revenue exceeded the expenditure by £61,285 and £205,796 respectively. The question of finance is, however, dealt with at greater length in its proper place in succeeding pages.

On the 5th December, 1899, a vote of want of confidence was carried against the Ministry of Sir George Turner, and after having held office for a period of 5 years and 70 days it gave place to that of Mr. Allan McLean.

On the 15th November, 1900, Mr. McLean's Ministry was overthrown by a motion of censure, and Sir George Turner entered on his second term of Premiership.

The following is the succession of Ministries, with their term of office in each case, from the inception of Responsible Government to the date of the publication of the present volume :—

No. of Ministry.	Name.	From—	To—	Duration of Office.	
				months.	days.
1	Haines	28 Nov., 1855	11 March, 1857	15	11
2	O'Shanassy	11 March, 1857	29 April, 1857	1	18
3	Haines	29 April, 1857	10 March, 1858	10	12
4	O'Shanassy	10 March, 1858	27 Oct., 1859	19	17
5	Nicholson	27 Oct., 1859	26 Nov., 1860	12	30
6	Heales	26 Nov., 1860	14 Nov., 1861	11	19
7	O'Shanassy	14 Nov., 1861	27 June, 1863	19	13
8	McCulloch	27 June, 1863	6 May, 1868	58	9
9	Sladen	6 May, 1868	11 July, 1868	2	5
10	McCulloch	11 July, 1868	20 Sept., 1869	14	9
11	MacPherson	20 Sept., 1869	9 April, 1870	6	19
12	McCulloch	9 April, 1870	19 June, 1871	14	10
13	Duffy	19 June, 1871	10 June, 1872	11	21
14	Francis	10 June, 1872	31 July, 1874	25	21
15	Kerferd	31 July, 1874	7 August, 1875	12	7
16	Berry	7 August, 1875	20 Oct., 1875	2	13
17	McCulloch	20 Oct., 1875	21 May, 1877	19	1
18	Berry	21 May, 1877	5 March, 1880	33	12
19	Service	5 March, 1880	3 August, 1880	4	29
20	Berry	3 August, 1880	9 July, 1881	11	6
21	O'Loghlen	9 July, 1881	8 March, 1883	19	27
22	Service	8 March, 1883	18 Feb., 1886	35	10
23	Gillies	18 Feb., 1886	5 Nov., 1890	56	18
24	Munro	5 Nov., 1890	16 Feb., 1892	15	11
25	Shiels	16 Feb., 1892	23 Jan., 1893	11	7
26	Patterson	23 Jan., 1893	27 Sept., 1894	20	4
27	Turner	27 Sept., 1894	5 Dec., 1899	62	8
28	McLean	5 Dec., 1899	15 Nov., 1900	11	10
29	Turner	15 Nov., 1900	.....	.....	

QUEENSLAND.

AS early as the year 1822, the existing settlements in New South Wales were considered by the authorities to be inadequate to accommodate the increasing number of prisoners constantly arriving in Port Jackson. It was therefore deemed advisable to make an examination of the coast and inlets to the northward, particularly in the vicinity of Port Curtis, with a view to finding a suitable locality for the establishment of a branch colony. Sir Thomas Brisbane, the then Governor of New South Wales, acting upon instructions from England, despatched Surveyor-General John Oxley in the month of October, 1823, in the colonial cutter "Mermaid," accompanied by Messrs. Stirling and Uniacke, to examine and report upon the inlets of Moreton Bay, Port Curtis, and Port Bowen. Discovering and naming the Tweed River *en route*, Oxley first examined Port Curtis, but deeming the site unsuitable for settlement, he turned south, as it was too late in the season to make an examination of Port Bowen. Upon his arrival in Moreton Bay on the return journey, the anchor was scarcely let go when a number of natives were seen about a mile distant, and amongst them one whose appearance was not that of an aborigine. This man subsequently turned out to be one Thomas Pamphlet, who, with three others, had left Sydney in an open-boat to bring cedar from the Five Islands (Wollongong). They were driven out to sea by a gale, and suffered terrible hardships, one man of the party dying of thirst. At last they were shipwrecked on Moreton Island, and had lived there with the blacks for a period of seven months. Pamphlet and his two companions, Finnegan and Parsons, had once started out to reach Sydney overland, but Pamphlet and Finnegan separately returned, after going some 50 miles; and Parsons was suffered to proceed alone. Guided by Pamphlet and his comrade, Oxley and Stirling set out to examine the large river of which the castaways told them, and which emptied its waters, after a tortuous course, into the south end of Moreton Bay. The explorers found the river, according to their informants' report, and pulled up it in a whale-boat for a distance of about 50 miles. Oxley was not provisioned for a longer journey, so he turned back at this point. To the river he gave the name of Brisbane, in honor of the Governor of New South Wales. The two rescued men were taken on board the "Mermaid," and the return voyage was made to Sydney, which the party reached on the 13th December, 1823. In the month of September following, Governor Brisbane despatched Oxley to Moreton Bay in the brig "Amity," with Lieutenant Millar and a detachment of the 40th Regiment in charge of thirty prisoners to prepare for the establishment of a penal settlement.

Almost the first person Oxley met upon landing on the beach near his old station at Pumicestone River was Parsons, the shipwrecked companion of Pamphlet. He had started out the year before to walk to Sydney, and had been given up for lost.

The spot named Redcliff by Flinders, during his exploration of the inlet, was selected for the new settlement, and extensive buildings were erected there. The site was, however, found to be disappointing, and a new one was chosen on the banks of the Brisbane River, some time after Oxley's departure. While the Redcliff settlement was being prepared, Oxley, accompanied by Allan Cunningham and Lieutenant Butler, made a fresh exploration up the river, and this time went as far as his boat could be navigated. Here the Surveyor-General and Cunningham proceeded on foot, ascended an eminence, and obtained an extensive view over the whole of what is now the West Moreton district, extending as far as the Albert River.

In the year 1825, Major Lockyer made a long-boat excursion up the Brisbane River, and, the stream being somewhat swollen by floods, he was enabled to penetrate inland for nearly 150 miles. During the same year, Captain Logan, of the 57th Regiment, was sent up from Sydney to take charge of the little settlement. At this time the entire population was recorded as comprising only forty-three males and two females. In May, 1824, Sir Thomas Brisbane, Governor of New South Wales, had visited the place, and officially approved of the last selected situation. He appears, however, to have been absolutely oblivious of the great possibilities of the river for future development, and somewhat coldly discounted Oxley's enthusiasm in this direction. While visiting the new settlement, the Governor ordered the abandonment to the natives of the buildings at Redcliff; the aborigines seem, however, not to have greatly appreciated this act of generosity, for they made no use of the gift, and gave to the deserted structures the name of Umpie Bong (literally "dead houses"), an appellation still preserved in "Humpy Bong."

Captain Logan was a man of energetic and resolute character, but his rule was marked by excessive severity in the enforcement of discipline. Under his direction building, clearing, and cultivation were vigorously pushed forward. The alignment of what is now the principal street in Brisbane originated in the long façade of a massive range of buildings built by Logan to serve as prisoners' barracks. These buildings, before their ultimate demolition, served successively for the first House of Parliament and for the Supreme Court. Logan erected, on an abrupt and elevated knoll which dominates the city, a windmill, which subsequently served as an observatory for watching, and still serves as a tower for signalling, the approach of vessels. It is said, however, that his industrial projects were not always directed by a knowledge equal to their needs, and a story is extant of his having sown the prepared rice of commerce in expectation of its germinating. Logan, besides being a builder and cultivator, was a vigorous explorer and an ardent botanist. He discovered the river which bears his

name, and voyaged up the Bremer, the principal tributary of the Brisbane, and finding at the head of boat navigation plentiful outcrops of limestone rocks and many indications of coal, he sent up a party of prisoners to construct a kiln, and quantities of lime were thence conveyed for use in the buildings of the main settlement, which had now received the name of Brisbane, and the population of which, at one time during Logan's rule, had risen to between 1,000 and 1,500 inhabitants. These were, however, with the exception of the civil staff and a hundred or so of soldiers to preserve order, all prisoners; no free person being permitted to visit or to settle without a special permit.

In 1827, Allan Cunningham, who, in company with Oxley, had already had some experience of inland exploration, and had sailed round the continent with King, set out from the Upper Hunter at the head of an expedition, with the intention of reaching Brisbane overland along an interior route. At the outset of his journey, and to avoid having his movements hampered by its spurs and lateral offshoots, he crossed the dividing range, and, turning northward, skirted the Liverpool Plains. After traversing much unpromising country, he reached the banks of the Gwydir River, and afterwards discovered and named the Dumaresq, so called after the colonel who had filled the post of Commissioner of the Australian Agricultural Company. Cunningham pierced northward from the stream just named through a belt of very poor country, and emerged on the 5th June, 1827, on the famous Darling Downs (named after the then Governor of New South Wales). This discovery was destined to have a most important influence upon the pastoral industry of the southern settlement, and to form a centre round which gathered the elements of the future colony of Queensland. On the east the Downs appeared to be shut off from the coastal settlements by an impassable range of mountains. But here fortune favoured the explorer, as it had previously done in his discovery of Pandora's Pass, which opened a gateway through the Liverpool Ranges to the rich plains beyond; and on this occasion a route through the mountains was found, and received the name of Cunningham's Gap. After noting the whereabouts of this pass the explorer retraced his steps to Segenhoe Station, on the Upper Hunter, which he had left on the 30th April, and from which he had been absent about thirteen weeks. Besides the discovery of the Downs, the most important results of this expedition were the finding of the streams which are tributary to the Condamine, and of the Dumaresq, the Gwydir, and the Barwon—in short, of that network of rivers that forms the Upper Darling system and feeds the main stream.

During the year 1827, Governor Darling came up from Sydney on a visit to the settlement at Brisbane, and expressed dissatisfaction with its site. In a subsequent despatch to Lord Goderich he actually suggested the abandonment of the place, the tediousness and difficulty of the approach rendering it extremely inconvenient. He suggested the removal of the settlement to Dunwich, a knoll on the bay shore of

Moreton Island, and recommended Stradbroke Island as a station for the first reception of prisoners.

In the following year Cunningham, accompanied by Charles Frazer, the Colonial Botanist, proceeded by sea to Moreton Bay, with the intention of discovering a practicable route to the Darling Downs from Brisbane. On his arrival, Captain Logan, with characteristic activity, organised an expedition, in which he took a leading part, to further the object of Cunningham's visit. The party attempted, by following up the recently discovered river Logan to its sources in the mountains, to find a path to the plains beyond the range ; but in this they were unsuccessful, and were compelled to retrace their steps to the settlement. Thereupon Cunningham made a fresh start from Limestone (Ipswich), on the Bremer, and on this occasion was entirely successful. He found the eastern outlet of the gap which bears his name, and then crossing the range he reached his old camp.

The young colony, deprived of the ministrations of religion during the first few years of its existence, was in 1828 provided with a chaplain, who after a very brief residence was withdrawn, owing to a difference with Commandant Logan.

In 1828 Cunningham went on his third expedition—the last he was destined to undertake—in what is now Queensland territory. On this occasion, after proceeding to Moreton Bay by sea, he devoted six weeks to the exploration of the Brisbane River, and examined it to its source, tracing its head waters among the eastern slopes and spurs of the main range. In the year 1830 the labours of Commandant Logan were brought to a tragic close. He had, at the head of a small exploring party, consisting mainly of prisoners of the Crown, pushed on beyond the boundaries of location, and was not again seen alive. His companions returned to Brisbane with the story that he had left the camp alone on a botanising expedition, and had failed to return. The officer left in charge of the settlement, Captain Clunie (who filled the position of next commandant), sent out a search party to look for his absent chief. On the fifth day the searchers found Captain Logan's body pierced with a spear and battered apparently with waddies, or aboriginal clubs. The genuineness of the evidence was accepted without question, and the murder charged to the blacks, though it subsequently leaked out, in half-hinted fashion, that the ill-starred captain had fallen a victim to the vengeance of his bond followers. Logan's remains were brought to Sydney and interred with military honors at Garden Island, in the same tomb as that in which were deposited those of Judge Bent, a friend of his early youth. Somewhat over fifteen years after Logan's death the Colonial Office granted his widow a pension of £70 a year, in recognition of her husband's services. Under Logan's directions some experiments had been tried, and some progress had been made in the cultivation of cotton. A report sent to the Colonial Office in 1828 showed that a bag of cotton sent to London from Moreton Bay was of excellent quality.

Captain Clunie, of the 17th Regiment, succeeded to the control of the settlement at Moreton Bay, as it continued to be called, and the history of his administration is little more than a record of offences and offenders and the degrading details of prison management and mismanagement.

In 1831 the population had risen to 1,241, of whom 1,066 were prisoners, 40 being women. In 1833 there were 1,128 bond males and 38 free, 30 bond females and 13 free. Four years later the number of prisoners had been reduced to 300. Governor Sir Richard Bourke thought little of Brisbane, even as a place of penal settlement. He had adopted all Sir Ralph Darling's prejudices against the locality and supplemented them with some of his own, and he prepared gradually for its abandonment.

In 1836 Moreton Bay was visited by Messrs. James Backhouse and George Washington Walker, two quakers who had engaged in a seven years' examination of the penal settlements at the antipodes, seeking everywhere an opportunity, by the ministrations of religion, to alleviate the sufferings of the convicts undergoing sentence. After returning to England, Backhouse published an account of their experiences, in which, amongst other deplorable circumstances, he noted that on one occasion he saw forty women working in a field at Eagle Farm, some of whom were very young, while in several instances the unfortunate creatures were compelled to work in irons. It must not be forgotten, however, that Backhouse wrote at a period when the penalty of death was attached in the statute-book to no fewer than 223 offences, and when men were hanged in batches even in so advanced a centre of civilisation as the city of London.

Governor Bourke had determined, in 1835, gradually to diminish the deportation of convicts to Moreton Bay, and to close the settlement. This was finally accomplished about five years later. Captain Fyans was commandant in succession to Captain Clunie, and ruled from 1835 to 1837; and Major Cotton succeeded to the control of the rapidly dwindling settlement. Then followed Lieutenant Gravatt, whose term of office extended from May, 1839, to July of the same year. Lieutenant Gorman was the next and last commandant at Moreton Bay. He arrived in 1839, and was entrusted with the duties of clearing away the last relics of the penal establishment. The convict settlement was broken up about the middle of the year, and in 1840 the first free settlers arrived in Brisbane, although the enactment against free settlers was still nominally in force. In the meantime the country around Brisbane had been thoroughly examined, one of the most enterprising of the local explorers being Andrew Petrie, who had arrived in Sydney in the year 1835. His arrival in Brisbane is noteworthy on account of the circumstance that the vessel which conveyed him, the "James Watt," was the first steamship to enter Moreton Bay. Soon after coming to the young settlement Petrie explored the coast as far as the present northern boundary of the Moreton district, and made some

important discoveries of indigenous flora. During one of his expeditions Petrie effected a landing about half-way between Moreton Bay and the entrance to Wide Bay, and there found a convict absconder named Bracefield (called by the natives "Wandi"), living in savagery with the blacks. With Bracefield's assistance Petrie found another young convict who had escaped from the settlement so long before that he had almost forgotten his own language. His name was James Davis, otherwise "Durranboi," and the story of his experiences among the aborigines is of the most interesting character. Andrew Petrie was for some time acting as foreman of works of the Royal Engineer's Department, at Brisbane, and his knowledge of the country acquired in this service was of the greatest assistance to the first free settlers. During the year 1840 Surveyor Stapleton and his assistant were murdered by aborigines near the head waters of the Logan. The culprits were captured in the following year, and, after trial, were found guilty and executed. But this was only one of a series of similar outrages, the blacks in the earlier days of free settlement in Queensland being particularly troublesome. In 1840 Patrick Leslie crossed the Great Dividing Range through Cunningham's Gap, and formed a station on the Condamine River, and in the following two years a great deal of useful exploration was carried out by the brothers Stewart and Sydenham Russell in the Darling Downs, Wide Bay, and Moreton districts. New South Wales squatters followed in their wake, and much country was taken up and utilised for the depasturage of sheep and cattle. In 1841 the population of Moreton Bay numbered exactly 200, and of these only 67 were free. This enumeration probably included a little colony established by grudging permission within 7 miles of the penal settlement as a Christian mission to the aborigines. The colony was exclusively German, and included two regular ministers and some peasants and tradesmen, with their families. The Colonial Office allowed them £1,298 in four years for the maintenance of 19 adults and 11 children. No good accrued to the aborigines from their ministration, as the blacks fought them instead of listening to them, and on one occasion the missionaries were driven to defend themselves with their muskets against their assailants. Government aid being withdrawn, the mission collapsed as a religious agency, and became a purely secular settlement. The German station is now an outlying suburb of Brisbane, where some of the mission station buildings may still be seen, while the descendants of the original party are numerous among the citizens. A contemporaneous mission of similar character, established by the Rev. Mr. Handt, of the Church of England, was also fruitless in the prosecution of the work of Christianising the aboriginal natives. Indeed the blacks at this time were too warlike to tolerate white approach in any guise.

In 1842 Governor Gipps, of New South Wales, visited Brisbane, and is said to have given directions to reduce the width of the streets in all subsequent surveys—a very short-sighted policy. His Excellency

subsequently reported to the Colonial Office the existence of forty-five squattages within 50 miles of Brisbane In 1842 the export of wool was 1,800 bales. In the returns of 1844 the population is given as 471 ; and the stock consisted of 660 horses, 13,295 cattle, and 184,651 sheep. From the date of the Governor's visit a marked improvement in the progress of the settlement was apparent. Moreton Bay was opened to free settlement ; and to provide the requisite holdings for expected immigrants, Brisbane was proclaimed a land district, the first sale of Crown Lands being held there on the 7th July, 1842. The first steamer of the Hunter River Steam Navigation Company which visited the harbour arrived the same year, and continued for a time to ply regularly between Sydney and Moreton Bay. The service was afterwards discontinued, one or two small sailing vessels being found sufficient for all purposes of trade. The prisoners had now been removed ; the old penal settlement being a thing of the past, a military commandant was no longer wanted, and the principal authority was vested in a civil officer—Captain Wickham, R.N., being appointed first police magistrate ;—and in 1843 Moreton Bay was granted representation in the New South Wales Legislative Council, as it existed under the old constitution.

In 1844 Leichhardt started out on his first expedition from Jimbone Station, on the Darling Downs, to Port Essington, by way of the Gulf of Carpentaria. Gilbert, the naturalist of the party, met his death at the hands of the aborigines during a night attack, and Leichhardt and his companions reached their destination after almost incredible sufferings. After an absence of nearly two years the explorers returned to Sydney by sea, and were received with the greatest enthusiasm. A public subscription was instituted, and a sum of nearly £200 was presented to Dr. Leichhardt. This was supplemented by a donation of £1,000 from the Government, and the thanks of the Legislative Council were voted to him and formally conveyed to the intrepid and successful explorer by the Speaker from the Chair. Port Essington was, however, subsequently abandoned as a port of settlement.

In the early days of free settlement a struggle, which continued for over twenty years, was begun between the squatters and the selectors for the possession of the public lands of the colony. This fight for the soil may be considered as having been definitely determined in favour of the selectors by the passing of the Crown Lands Alienation Acts of 1866 and 1868. Another question which gave rise to constant rancour was the employment of convict, as against free labour.

The aborigines continued to give the colonists trouble during the early years of the settlement. A new track had been formed to the Darling Downs, and along this route the blacks showed themselves especially bold and hostile. At a point which led from Ipswich to the mountains they boldly attacked a caravan of bullock drays, and the drivers and attendants fled for their lives. The drays were looted by the victorious aborigines, who burnt whatever they could not consume

Thereupon the squatters assembled in force to make reprisals, and organised a foray upon the plunderers. They found the tracks of the natives, and, following them up, forced the band to disperse and take refuge on Hay's Peak. Many of the natives were killed, but the survivors remained untamed; and it was found necessary to employ a detachment of soldiers as a permanent guard at the foot of the main range, in order to assure the safety of the travellers by this route. Elsewhere, however, the blacks could not be kept under control, and the early forties were marked by murders of settlers—men, women, and children—and wholesale outrage, incendiarism, and pillage.

Late in the year 1845 Major Sir Thomas Mitchell, Surveyor-General of New South Wales, started out on his famous exploration of tropical Australia, at the head of a little army. Edmund Kennedy was his second in command, and he took with him besides a surgeon, twenty-eight men, eight bullock drays, three horse drays, and two boats. He was absent about a year, and discovered many splendid rivers and a great deal of fine country; and his expedition did much to enlarge the geographical knowledge of Central Queensland.

The first Queensland newspaper, the "Moreton Bay Courier," began publication in 1846, and still exists as the "Brisbane Courier.' Communication by steamer between the capital and Ipswich was established about the same time; and Moreton Bay was declared a port of entry, with resident Customs Officers.

At this time Mr. Gladstone essayed the formation of a colony at Port Curtis, to be called North Australia, to consist of "exiles," or criminals who had merited by good behaviour some alleviation of their lot, and Colonel Barney was sent out to establish this probationary penitentiary. However, the scheme fell through, and Barney was re-called.

Leichhardt again took the field, and left Jimbone Station, Darling Downs, in the month of December, 1846, just as Sir Thomas Mitchell was returning from his expedition to Tropical Australia. Leichhardt's intention was to cross the Continent from east to west, making for the settlement at Swan River, in Western Australia. The attempt, however, ended in failure; dissensions broke out among the explorers, the party became fever-stricken, a flock of goats had to be abandoned, most of the bullocks and some of the horses and mules were lost, and a retreat had to be made to the confines of settlement. Another expedition, made by Leichhardt to the Fitzroy Downs, discovered by Mitchell, was also unsuccessful in its results. A Government Surveyor named Burnett made a useful journey of exploration in 1847, which added greatly to the knowledge of the country forming the hinterland of Wide Bay. The Burnett River bears this explorer's name. In 1847, Edmund Kennedy was sent out to trace the course of the Barcoo of Mitchell, and to determine whether or not it was identical with the Cooper's Creek of Sturt. Kennedy soon set this question at rest, and discovered on his own account the Thompson, one of the principal affluents of the Barcoo, or Victoria.

The beginning of the year 1848 saw Leichhardt once more making a plunge into the unmapped wilderness, but this time he did not return. He set forth poorly provisioned, in all save live stock, and with an insufficient supply of ammunition, to realise his great trans-Continental project; and nothing more is known than that he reached the Cogoon River. The same year another ill-fated expedition set out; this time for the north. The leader was Edmund Kennedy, and his destination Cape York. He took with him eleven white men and a black boy. Of the whole party, only the black boy and two of the white men returned; the rest of the party perished, the leader having been speared by the natives.

A number of Chinese were imported in 1848 to act as shepherds to the squatters, there being at that time a great dearth of this kind of labour. Emigration from Great Britain of free colonists of a superior class was also encouraged, with a view to the counteraction of the evils arising from the convict system. Among the foremost leaders of this movement was the Rev. Dr. J. D. Lang, who had visited Brisbane in the year 1846. He was the means of introducing to the young colony hundreds of artisans and their families; but the promoter of this type of immigration frequently came into collision with the authorities at the Colonial Office. One of the ships chartered under his auspices, the "Fortitude," gave its name to Fortitude Valley, now a well-known section of the City of Brisbane.

For the next few years the history of the settlement is chiefly a record of disputes between the squatters, who were desirous of a renewal of transportation in order to obtain cheap labour, and the great bulk of the free population, who were decidedly averse to any such proposal. The outcome of this warfare between the two parties, combined with the rapid progress of the young colony, was the gradual growth of a keen aspiration for independent Government. The first public meeting held in Brisbane to discuss this matter was convened in January, 1851; and the movement thus inaugurated was continued until brought to a successful issue in the granting of separation by the Imperial authorities in 1859. Moreton Bay was raised to the dignity of a Residency in 1853, and the Police Magistrate, Captain Wickham, was appointed first Government Resident.

With the outbreak of the gold fever in 1852, there was a heavy exodus of population from the northern districts to Victoria. As happened in all the other colonies, ordinary business of all kinds was paralysed, and those who could not go to the diggings themselves organised and supported expeditions for vigorously prospecting all parts of the occupied districts which were regarded as likely to be gold-bearing. However, nothing substantial came of the researches made at this time in the Moreton Bay District, and it was long believed that northern Australia was destitute of rich deposits of the precious metal, an erroneous idea that was afterwards amply dissipated in the magnificent discoveries at Charters Towers, the Croydon, the Hodgkinson, the

Palmer, the Etheridge, the Gilbert, the Woolgar, Mount Morgan, and various other rich finds. In course of time people recovered their composure, and enterprise again flowed in its ordinary channels. The cultivation of cotton was attempted, but not on a large scale; the coal measures on the banks of the Brisbane and the Bremer were worked with redoubled energy, and wheat-growing and arrowroot culture were begun.

The aborigines continued to give trouble to the settlers in the frontier districts. On one occasion four or five hundred natives combined to attack a station in the Maranoa District, and were beaten off while attempting to storm the hut in which the hands had entrenched themselves. In 1851, the first wool ship from Moreton Bay sailed direct to London; and in the same year Brisbane became a place for holding a Circuit Court. The Judge sat in the chapel of the old convict barracks, an apartment which, after separation, was used as a Legislative Assembly Chamber; and again, until its demolition, accommodated the Supreme Court of Queensland.

The non-return of Leichhardt was a matter of grave anxiety to the colonists, and the most circumstantial rumours reached them that the intrepid explorer had met with an untimely end. These rumours became so prevalent and disquieting that at length Hovenden Hely, a former officer of the ill-starred Leichhardt, was sent out in January, 1852, to search for the missing expedition. He effected, however, nothing; and, his provisions running short, he was compelled to beat a retreat to the settlements. In 1855, A. C. Gregory took up the solution of the mystery of the interior, and made extensive explorations in north-west Australia and the country around the Gulf of Carpentaria; but, as far as the fate of Leichhardt was concerned, he was equally unsuccessful.

In the year 1855, the Fitzroy River was first navigated, and the adjacent country speedily taken up by the squatters. At Canoona, a station only 7 miles distant from the point of debarkation, a patch of rich alluvial gold deposits was subsequently found, and the discovery was so exaggerated by rumour, that a fleet of vessels from all the ports in Australasia made a speedy appearance in Keppel Bay, conveying an immense rush of diggers and adventurers from all quarters, even New Zealand being represented. A township immediately sprang up; but all the payable gold was soon exhausted, and starvation stared thousands of adventurers in the face. The country around was scoured for the precious metal, and was declared barren, though since then thousands of ounces have been taken from it. The diggers were at their wits' end, when the Governments of New South Wales and Victoria despatched steamers to take away such as had been unable to leave at their own cost, or with the help of the friends they had left behind them.

The memory of the lost Leichhardt was suddenly revived, in 1857, by the curious story told by a convict named Garbut, who had been a frontier bushman, and who offered the disclosure of a great secret as the price of his liberty. He stated that he had paid a visit, far beyond the

outposts of settlement; in fact, in the very heart of the Continent, to a colony of absconders from the old penal depôts. These outlaws had been chanced upon by Leichhardt in the course of his expedition, and they, fearing disclosure and punishment, had compelled him and his party to remain with them. Public sympathy eagerly caught hold of the fable, and Gregory was again sent out to search for the lost explorer. Garbut's fiction was easily exploded by a passage through his invented paradise, where the only thing the search expedition found, which could, by any possibility, be identified with Leichhardt, was the letter "L," cut into a tree growing near the Barcoo River. Gregory traversed a large area of unknown country, and was received in Adelaide with great enthusiasm.

Moreton Bay entrance was the scene of a deplorable shipping disaster in 1856, when the immigrant vessel, "Phœbe Dunbar," grounded at Amity Point, Stradbroke Island. In the same year, eleven persons were murdered by the aborigines at Hornet Bank, on the Dawson River. On the 6th September, 1858, Brisbane was proclaimed a municipality. On the 10th December, 1859, the whole of New South Wales north of Point Danger was proclaimed a separate colony under the name of Queensland.

The work of exploration continued to be pushed vigorously forward. In 1858–9, William Landsborough explored in detail a considerable stretch of territory on the Isaacs and Suttor Rivers; and George Elphinstone Dalrymple organised an expedition by land, and ran down the Burdekin towards the sea, while a schooner sailed up the coast to meet him at Upstart Bay. In 1861, Burke and Wills, after traversing the continent from Melbourne to the Gulf of Carpentaria, perished from privation on the return journey in the Great Stony Desert of Sturt. This ill-starred expedition crossed and re-crossed the only portion of Queensland which, up to then, remained unexplored, viz., the extreme west, from Cooper's Creek to the great Gulf; and three relief expeditions simultaneously set forth from bases of operations widely apart to rescue them, or to ascertain their fate, and these added greatly to the growing knowledge of the interior. The relief expedition under McKinlay, with whom was W. O. Hodgkinson, started from the south, and ultimately reached the coast, where the party found Captain Norman, R.N., on the Albert River with H.M.S. "Victoria," and the wreck of the tender "Firefly" moored as a hulk in the stream. The second relief expedition, led by Commandant Fred. Walker, started from the Bauhinia Downs, on the Dawson River, on the 7th September, 1861, and proceeded north-westerly, *via* the head-waters of the Alice and Thompson Rivers. Walker discovered and named the Norman, and after considerable exploration in the north-west of the colony, made his way by the Gilbert Ranges and the Burdekin River to Port Denison. Landsborough, the leader of the third relief expedition, did not succeed in tracing the route of Burke and Wills, but he was, nevertheless, received in Melbourne with every mark of public appreciation.

A noteworthy expedition of this period was that of the brothers, Frank and Alexander Jardine, who essayed the transport of a mob of cattle to Somerset, Cape York, and who literally fought their way through hordes of hostile blacks, ultimately arriving at their destination in safety. In 1866, a man named Hume, pretending to have authentic information concerning the fate of Leichhardt, managed to induce a couple of believers to accompany him to Cooper's Creek. Reaching the creek the travellers for four days journeyed inwards without water, and then they separated, each man hunting for the precious fluid by himself. One was fortunate enough to find water, and returned to the rendezvous only to discover that his comrades had departed; so he went on to a station for help. Searchers sent out with succour found the body of Hume beside that of his horse, which he had killed in order to drink its blood. The corpse of the other man was afterwards discovered in another direction. Some years later a person named Skuthorpe, frontier bushman and squatter, also professed to have found relics of the lost explorer, but he never suffered them to be seen, and his assertions were received with incredulity.

The Royal Letters Patent creating the colony of Queensland were issued, as already mentioned, on the 13th May, 1859. The first Governor appointed by the Crown to the superintendence of the young province was Sir George Ferguson Bowen, who arrived in Brisbane by the war corvette "Cordelia," on the 10th December, 1859, and, on landing, formally proclaimed the colony, amidst universal jubilation.

The territory over which Governor Bowen had been appointed to rule was noble as regards area and magnificent in point of resources. It extended for 1,300 miles from north to south, and 900 miles from east to west, including great varieties both of soil and climate, and furnishing the products both of the temperate and torrid zones. It occupied the north-eastern portion of the continent, and comprised an area of 668,497 square miles, being thus more than twice the size of New South Wales and nearly eight times that of Victoria.

Besides the Royal Letters Patent creating the colony and appointing its Governor, there was a second order which invested His Excellency with specific powers to make laws and provide for the administration of justice, while the Governor of New South Wales was empowered to create a nucleus of a local Parliament by appointing for four years such persons as he might deem qualified to sit in the new Legislative Council. The Governor of Queensland was charged with the task of completing the *personnel* of the Council by additional nominations of members with life tenure. With respect to the election of members to form the representative chamber, the Legislative Assembly, the franchise was limited to such residents as had at least the qualification of a £10 annual lodger's tenancy. Great dissatisfaction was expressed in the new colony at the exclusion from its territorial area of the rich territory comprising the Clarence, the Richmond, and the New England Districts; and, for years after, this north-eastern portion of the mother

colony indulged in sporadic outbreaks of quickly subsiding agitation for union with Queensland.

The population of the new colony at the date of its separation was about 25,000. The pastoral industry was almost the only one deserving the name, agriculture being limited to the cultivation of maize and of hay, and mining was represented by a couple of coal pits of small output. Three-fourths of the richest pastoral land in the colony were untenanted save by aborigines; and, though population was increasing, it was but at a slow rate. At the time of the establishment of separate government, there was not a seaport town in the colony to the wharfs of which a laden ship of 1,000 tons could approach; and there was also scarcely a made road in the whole territory, although the city of Brisbane had been proclaimed a municipality on the 6th September of the year preceding.

With the Governor came Mr. Robert G. W. Herbert, who had, like His Excellency himself, served as private secretary to Mr. Gladstone. This gentleman was appointed by Sir George Bowen to act as Colonial Secretary and First Minister. On his return to England some few years later, Mr. Herbert became Permanent Under Secretary of the Colonial Office. The elections for the first Legislative Assembly were held early in the year, and the first Parliament was opened on the 29th of May, 1860, ninety years and a few days after the date when Captain Cook visited Moreton Bay.

During the tenure of office of the first Herbert Ministry, legislation dealing with primary and secondary education was adopted. The former was undertaken by the State, and the administration delegated to a nominee board, while provision was made for the latter by affording facilities for the founding of grammar schools under trustees, with endowments from the consolidated revenue. On the 6th November, 1860, State-aid to religion was withdrawn. In 1861, laws of equal importance were passed; among them measures providing for municipal government, and for the transfer of real estate, the latter founded on the Torrens system. The first census was taken on the 7th of April, in the same year, when the population of the colony was found to be 30,059. The first telegraph message was despatched on the 10th of the same month. The first State trial (Regina *v.* Pugh) took place in 1861, the question at issue being the right of free discussion, and resulted in favour of the defendant. The first Queensland Exhibition was opened on the 29th October in this year.

During the provincial connection of Moreton Bay with New South Wales, thousands of immigrants were constantly being poured into Sydney, the northern colony having, perforce, to be content with an occasional shipload. With the advent of separate Government, Queensland inaugurated an independent immigration system, selecting Mr. Henry Jordan, who proved a particularly efficient agent, to advocate in England the advantages of the colony as a sphere for enterprise. Special inducements were offered by the Legislature to desirable immigrants.

To those who defrayed the cost of their own passages orders were granted available in payment for lands, representing to each adult £18 on arrival, and £12 additional after two years' residence, two children being accepted as equal to one adult. An extensive traffic in these orders immediately sprang up. The newly-arrived immigrants uncertain where to proceed or how to act under their altered condition of life, were easily persuaded to sell their orders at less than their value, and the purpose for which they were issued was thus defeated, while the newcomers drifted into hired service or hung about the towns; though a certain proportion did take up land and settle down. Later on a Land Act was passed which made provision for the establishment of agricultural reserves, each containing 100 acres, at East and West Moreton, Wide Bay, Port Curtis, and Keppel Bay; and reservations for settlement, 10,000 acres in extent, were to be defined within 5 miles of every town of 500 inhabitants. These lands were made available to selectors at £1 per acre, payable by instalments. As a result of its immigration policy, the colony soon received a large accession to its population; in the first four years alone the number added was not less than 46,422.

During the first years of responsible government the pastoral industry was exceedingly prosperous. Settlers were constantly pushing forward the frontiers of settlement, though greatly harassed by the hostility of the aboriginal inhabitants. Murders by the blacks of solitary shepherds and straggling stockmen were constantly being reported, without, however, exciting much more than passing interest and annoyance. The colony was greatly shocked, therefore, when a massacre occurred on a larger scale, and a whole family named Wills, together with their station hands, nineteen persons in all, were slaughtered by the aborigines in one night. This outrage was followed by an act of vengeance by the whites, the police, assisted by volunteers, killing some 170 aborigines whom they pursued to the Midway Ranges.

In 1861, Governor Bowen paid a visit to Cape York with the object of selecting a station to replace that so long uselessly maintained at Port Essington. Nearly every commander of a Queen's ship exploring in the seas lying to the northward of the colony had condemned it, and expressed a preference for Port Albany. His Excellency confirmed their recommendations, and appointed as Government Resident Mr. Jardine, who was established with a small detachment of marines at Somerset, a harbour of refuge on the inner side of Albany Island. By this time pastoral settlement had spread all along the coast as far north as Cardwell; inland, the Thompson River was being rapidly occupied; and northward, the country watered by the Flinders River; the Plains of Promise were occupied by cattle, and the hinterland of the Gulf of Carpentaria was rapidly taken up for squattages. Extensive deposits of copper ore had been discovered in the Peak Downs District, and active mining operations were proceeding.

The second Parliament met on the 22nd July, 1863, and did not dissolve until the 29th May, 1867, and, during the greater part of its

term, the Hon. Robert Herbert retained the confidence of the representative legislature. On the 21st September, 1863, the Queensland Bank Act was passed, and the first bank having its headquarters in the colony was established under its provisions. The bank began business in October, but had only a brief life, being overwhelmed in the financial cataclysm of 1866.

Just after the accomplishment of separation, a movement was initiated by a public company to construct a tramway to facilitate traffic between the Darling Downs and the Bremer at Ipswich, to which point river steamers daily plied from Brisbane. This project collapsed, and the conception of a railway took its place. The starting of construction was, however, delayed for several years, owing to the contentions which arose between Brisbane and Ipswich as to the proper point of departure. At length the squatting party in Parliament, seeking to deal out a rebuff to the capital, which represented the democracy (mainly immigrant) of the colony, decided on Ipswich, and the work of construction was begun. The gauge adopted was the 3 ft. 6 in., and the line was opened from Ipswich to Grandchester on the 31st July, 1865. Brisbane obtained, as some compensation, a measure for improving the access to the town, and the river bar and the flats were dredged with the view of cutting a deep-water channel. Sugar culture was encouraged by liberal arrangements for the acquisition of plantations on the alluvial lands along the coastal rivers and creeks; and the first sugar from Queensland cane was manufactured on the 9th September, 1864. The growth of cotton was effectually stimulated by liberal bounties granted by Parliament on the export of the staple. Between 1867 and 1874 no less than 10,023,585 lb. of cotton were grown and exported, but later the practice of paying bounties ceased and the cultivation died out.

The revenue of the young colony was not, of course, adequate for defraying the cost of founding its institutions and carrying out great public works, and recourse had early to be had to the money market of London, where, during the years 1861–3–4, loans had been authorised and negotiated aggregating £1,856,236.

From January, 1860, to the end of September 1865, over 46,000 immigrants had been added to the population of the colony; the Bank of Queensland, with local share-holding and a local directorate, had been established, money was plentiful and credit readily obtained, building societies had been established, and business enterprises of all kinds were flourishing. In 1865, however, the colony was forced to repeat the bitter experience of South Australia in 1841, of New South Wales in 1842, and of New Zealand in the cold days of financial collapse that succeeded the Vogel policy of national expansion and construction of public works. There can be no doubt that the expenditure of borrowed money had been extravagant and in not a few instances unjustifiable. The waste of money on railways and in dredging was enormous, and the stoppage of this extravagance was coincident with one of those

waves of depression which, from time to time, afflict the commercial operations of the world. Its effects were felt with emphatic severity in Queensland ; prices of pastoral products fell ; the banks stopped the granting of credit and called in their advances. Parliament naturally turned its hand against the Herbert Ministry which was driven from office. The new Ministry was led by the Hon. Arthur Macalister, and attempted to stem the torrent of disaster, but confusion reigned supreme, and after six months it was swept aside. The Hon. Robert Herbert again essayed the task of governing the country and again succumbed after three weeks' trial. On the 7th August Macalister once more accepted office amid the wildest public panic. The failures in Great Britain of the banking firm of Overend Gurney, and the great contractors, Peto, Brassey, and Betts, who had the contract for the railway then being constructed, and also for the Victoria bridge, had greatly intensified the crisis in Queensland ; but it was hoped that the storm might be weathered with the help of a freshly authorised loan. The Sydney agency of the Agra and Masterman's Bank had already undertaken to make the necessary advances, when the news from London of the collapse of that institution brought total wreckage in its train. The Bank of Queensland closed its doors ; investment society after investment society rapidly went to the wall, insolvencies followed each other in bewildering succession, and the whole fabric of social polity seemed to be absolutely disintegrating. The Treasury was totally depleted—trust funds, saving banks' deposits, and ordinary revenue had alike disappeared. Tenants ceased to pay their rents, and thousands were discharged from employment, or had to forego the receipt of their salaries ; even the navvies engaged in railway construction were turned adrift by the contractors who could no longer pay their wages. The discharged navvies thereupon collected in a menacing body, seized a train going to Ipswich, and marched upon the city of Brisbane, heralded by rumours of the most alarming description. Reports circulated among the citizens that the malcontents had sworn to loot the shops and the banks, to burn down Government House, and to hang the Ministers of the Crown. The members of the Government were panic-stricken, and behaved as if they were demented, their abject terror serving only to augment the public alarm. The police were, however, armed, and the members of the Civil Service provided with batons, and sworn in as special constables. Many citizens were also sworn in, but the only things served out to them for the protection of the community were badges and rosettes. When the navvies arrived they were found to number only 125 very weary famished men ; but they were speedily reinforced by many of the local unemployed. The Riot Act was read, the police loaded their rifles with ball cartridges, and the men were headed off to a vacant reserve on the flank of Windmill Hill, where they were furnished with food and addressed by the Roman Catholic Bishop and others. Employment was found for them on relief works, where they received 5s. a day and rations, and the difficulty was tided over.

This diversion gained for the Ministry a little breathing time, of which they proceeded to make immediate use. Parliamentary sanction was obtained, and £300,000 of Treasury bills at short dates, and bearing 10 per cent. interest, were issued, and realised £298,671, thus staving off the total collapse which apparently was imminent. One hundred thousand pounds of Treasury notes of £1 each, serving alike as relief to the Government and as a currency, were also put into circulation, and other devices were resorted to in order to avert financial ruin. Just prior to this great crisis, Kanakas to work on the sugar plantations were first introduced into the colony, and the germ of a disintegrating social factor was thus sown which was destined to produce unpalatable fruit in later years of development. In the month of September, 1867, a miner named James Nash, while wandering in the Wide Bay district, found indications of gold, and in a day or two had washed out sufficient of the precious metal to represent a value of some £200 or £300. The news soon became known far and wide, and the discovery was announced to the authorities. Nash led the Gold Commissioner and nearly the whole population of Maryborough to the scene of his fortunate find. The whole of Queensland was in a turmoil, and thousands of impoverished settlers gathered to the new "rush." Then was unearthed the Curtis nugget, containing £3,000 worth of gold, and a tremendous influx of diggers set in from all parts of Australia and New Zealand. The town of Gympie sprang up, and many localities in the neighbourhood were found to contain gold in alluvial deposit. The discovery was opportune, and gave a new impetus to the hopes of the colonists. The field was situated about 100 miles north of Brisbane, and has since proved one of the most important gold-producing centres of the colony.

During the Macalister *régime* a Stamp Duties Act was passed, also an important measure dealing with the alienation of the Crown lands; but the result of the general election failed to confirm Mr. Macalister's policy, and his Ministry was succeeded by that of the Hon. Robert R. Mackenzie, who, retaining office for a little more than a year, appealed to the country, and, on the meeting of the fourth Parliament, was defeated. In spite of the political instability, the colony was now, once more, upon the upward grade. The new Land Act gave greater facilities for settlement, and the sugar industry began to give signs of importance, and to replace the languishing cotton plantations. By the end of 1869 there were in the colony twenty-eight sugar-mills at work.

Sir George Bowen surrendered his office just on the eve of the new era of promise and financial confidence, leaving the colony on the 4th January, 1868. The Government was administered till the 14th August following by the Hon. Colonel (afterwards Sir) Maurice Charles O'Connell, President of the Legislative Council. Sir George Bowen's successor, Colonel Samuel Wensley Blackall, assumed the responsibilities of office on the 14th August, 1868.

The Hon. Charles Lilley's Ministry succeeded that of Mr. Mackenzie on the 25th November, 1868, and lasted till the end of May, 1870. During its term of office the Civil Service Act was repealed, a number of measures dealing with court procedure were passed, and amendments were made in the electoral laws. The tenure of pastoral leases was changed by making provision for the resumption, at the discretion of the Government, of lands as required for settlement, subject, however, to the approval of Parliament.

During Sir Maurice O'Connell's administration, and early in the year 1868, the Duke of Edinburgh, who was making the tour of the Australasian Colonies, paid a visit to Brisbane, and was received with great enthusiasm.

The colony continued to advance, and it owed no little of its prosperity to the successive discoveries of gold made within its borders. One after the other, the new fields afforded scope to the energies of the digger, and opened up fresh avenues for the employment of the capital of the speculator. Ravenswood, the Cape River, the Gilbert, the Etheridge, Charters Towers, and Cloncurry, are all gold-bearing areas, still worked, which were opened up about this period, and attracted population and invited investment. There was, however, the germ of future trouble which became more serious as the years went by. This was the presence among white people of an alien and coloured race. The expansion of the sugar industry had created a demand for cheap labour, available for employment on the plantations. An old South Sea whaling Captain, named Robert Towns, who had accumulated great wealth in trading with the South Sea Islanders prior to settling in Sydney, was among the earliest to engage in sugar-cane growing on a large scale. He first took up a plantation on the Logan River; but is best known as the founder of Townsville. With a view to working his plantation more cheaply he quietly brought to the colony a shipload of Kanakas, as the South Sea Islanders are termed; and it was not long before other planters began to follow his example. In 1868, an attempt was made to legislate restrictively with regard to the traffic in this class of labour; but the sugar interest had become politically powerful, and the Legislature confined its action to passing an Act to regulate recruiting for labour in the South Seas, and the conditions of the contracts made with the Islanders. The early records of "black-birding" cruises, and the scandal connected with the *Hopeful* case, have cast a cloud of suspicion upon the entire system. The ships of Her Majesty's Navy eye with severe scrutiny the doings of the labour boats; and the white workers in the colony resent the competition and the presence among them of an inferior and an alien race. They allege, that cheapness is the only cause of the employment of savages in a civilised community and the capitalists retort that the work is such that Europeans could not perform it, and that the employment of Kanakas has enabled an industry to be developed, which otherwise, like the cultivation of cotton, would not be possible—an industry, moreover, which indirectly

furnishes employment to large numbers of white labourers in other departments of production and distribution. Some notion of the proportions rapidly attained by the traffic in South Sea Island labour may be formed from a consideration of the fact that in 1868 (when official statistics first became available) six vessels brought 437 males and two females; in 1869 five ships brought 276 males and two females; and in 1870, nine ships brought 1,294 males and 18 females.

In the year 1869 another step was made in the progress of public instruction, provision being made under State subsidy for secondary education by the establishment of the Brisbane Grammar School. In the month of May, 1870, the Hon. Charles Lilley had no longer the command of a majority in the Legislative Assembly, and resigned. The Hon. (afterwards Sir) Arthur Hunter Palmer was thereupon summoned to form a Ministry, and two months later he obtained a dissolution. On meeting the new Parliament, Mr. Palmer found that his policy had been confirmed by a majority of the electors; and he was able to retain office until the 8th January, 1874.

Governor Blackall, the most popular and the most deeply regretted of all the representatives of Royalty who had ruled the colony, died in office on the 2nd January, 1871, and the Government was administered by the Hon. M. C. O'Connell, President of the Legislative Council, until the arrival of the Marquis of Normanby on the 12th August following. In the month of June of the same year, after a life of rather more than six months, the fifth Parliament was dissolved; but the succeeding one, opened in November, brought no change in the administration.

The Queensland National Bank, which has been a fertile source of political trouble, and in connection with which there has been such a vast amount of litigation, was founded in 1871, and was opened on the 2nd of June that year.

In the year 1872 immense deposits of tin were discovered near the south-eastern border of the colony, at a place now famous as Stanthorpe, and almost simultaneously attention was directed to the extensive lodes of copper ore in the Mount Perry Run, Burnett District. The existence of opal in the northern part of Queensland was also brought to light, followed shortly afterwards by the discovery of extensive beds of this gem on the Bullo, in the Warrego District. The mineral discoveries at Stanthorpe and Mount Perry were only the precursors of others equally rich and extensive, and the colonists found that they were dowered with every kind of hidden wealth that only awaited their exploitation. A heavy fall in the market price of tin and copper somewhat checked the extravagances of their day dreams, and great losses were experienced by many who had indulged in too eager speculation. In 1872 the discovery of coal in the Wide Bay District added a further area to the proved coal measures of the colony; but the mineral discovery of the most sensational character during this year was that of the Palmer gold-field by Mr. William Hann, who had been despatched to explore

and prospect for minerals in the wild country outside the limits of settlement, in the base of the Cape York Peninsula. Mr. Hann had associated with him Mr. Taylor, a geologist of established reputation, while Dr. Tate accompanied the party in the capacity of botanist. Prospecting was conducted over a very wide area of country, and several important geographical discoveries were made, one of the most notable being that of the Palmer River, named after the Premier. Here prospects of gold were found by Mr. Warner, the surveyor of the expedition, a discovery which subsequently resulted in the development of one of the richest gold-fields in Australia, though the man who chanced upon it thought himself fortunate in being rewarded by half a pound of coarse fig tobacco. In 1873 James Venture Mulligan took up the work of prospecting for gold at the point where Hann had left off, and was fortunate in finding payable "shows" for some 40 miles in the bed of the Palmer River. Acting on Mulligan's advice the Government opened Cooktown, and sent up officers to that gold-field. After prospecting and finding gold for 80 miles along the course of the Palmer, and for a radius of 40 miles outside the Palmer, Mulligan's party applied for and obtained the Government reward of £1,000. The fame of Cooktown spread far and wide throughout the civilised world, and a great "rush" set in, thousands of diggers swarming to the spot in a fleet of vessels, which were moored or anchored hard by the estuary of the Endeavour River, where Cook had beached his battered barque over a hundred years before. Among the invaders came hordes of Chinese, and the friction caused by their intrusion on the field occasioned legislative action, which excluded men of that race from all gold-bearing areas until a certain period had elapsed after discovery.

Up to this time Ipswich had been the terminus of the railway nearest the coast, but it was now resolved to remove the absurd anomaly of leaving the metropolis and principal seaport still disconnected from the railway system of the colony, and in January, 1873, the extension of the railway from Ipswich to Brisbane was begun. In June of the same year Captain Moresby unfurled the Union Jack in New Guinea, and formally read a proclamation taking possession of it in the name of Queen Victoria; his action, however, was not confirmed. During this cruise the blacksmith on board H.M.S. "Basilisk," Captain Moresby's vessel, reported the discovery, a few miles inland, of gold-bearing quartz. This discovery has since been confirmed by numerous visits of gold-hunting diggers, particularly to Sudest and Woodlark Islands. In the following year the Hon. Henry Parkes, at that time Colonial Secretary for New South Wales, addressed a minute to Governor Robinson, advising that an effort be made towards the colonisation of New Guinea under British auspices, but no definite answer was received from the Home Government.

Mr. George E. Dalrymple was again sent out by the Government in 1874 to extend his researches along the north-eastern seaboard. He left

Cardwell with a party of twenty-six men, including thirteen well armed native troopers, in the cutters "Flying Fish" and "Coquette" — crafts of some 10 or 12 tons burden. He made many and important discoveries, passing and naming rivers, harbours, and roadsteads, and finding large areas of rich alluvial coast lands, which proved of great subsequent value for the cultivation of tropical products. In 1875 the settlement at Port Albany, lying too far from the route of vessels navigating Torres Straits, was abandoned by the Admiralty, the marines were withdrawn, and a new station was established by the Government of Queensland on Thursday Island, one of the Prince of Wales Group, in Torres Straits, a change which has worked very satisfactorily.

In 1875 the question of the annexation of New Guinea again came to the front, while a large public meeting held at Sydney, in the parent colony, also declared in favour of the proposal. The "Chevert," fitted out by the Hon. William Macleay, M.L.C., to explore south-west New Guinea, made no new geographical discoveries, but it brought back an immense collection of specimens of the greatest interest to naturalists.

The Marquis of Normanby had departed from the colony on the 12th November, 1874, and until the arrival of his successor, Mr. William Wellington Cairns, on the 23rd January, 1875, the Government was administered once more by the President of the Legislative Council, the Hon. M. C. O'Connell. Governor Cairns left the colony on the 14th March, 1877, to take up the *rôle* of Administrator of South Australia, and the Hon. M. C. O'Connell filled the vice-regal chair until the 10th of April following, when Sir Arthur Edward Kennedy, G.C.M.G., C.B., took up the responsibilities of Governor. During Sir Arthur Kennedy's absence on leave, from the 19th March, 1880, till the 22nd November of the same year, the Hon. Joshua Peter Bell, President of the Legislative Council, administered the Government. Sir Arthur Kennedy left the colony on the 2nd May, 1883, and the Government was administered by Sir Arthur Hunter Palmer, K.C.M.G., the President of the Legislative Council, until the arrival of the next Governor, Sir Anthony Musgrave.

The most important political event of 1878 was the restriction of Chinese immigration into the colony. At that time it was estimated that there were about 18,000 or 19,000 of these aliens distributed about the various mining fields. At Maytown, in the year 1878, a serious fracas took place amongst the resident Chinese, resulting in the deaths of several of their number.

In the year 1879 Mr. Thomas McIlwraith succeeded the Hon. John Douglas as Premier, and immediately revived the project of a trans-continental railway on the land-grant system. The new Ministry had no difficulty in carrying through Parliament a Railway Companies Preliminary Act, which conferred upon the Government power to enter into treaties for the construction of railways, subject, however, to the confirmation by Parliament of any arrangement that might be

made with contracting syndicates. An association of British capitalists was soon negotiating terms with the Government for the construction of the long canvassed line from Charleville to the Gulf of Carpentaria, with a terminal station at Point Parker; and General Fielding was sent out in charge of an expedition of engineers to report upon the proposed route. This report was so favourable that a preliminary agreement was, after some delay, signed and sealed between the Government and the contracting syndicate. The squatting interest in Parliament became alarmed, however, at the large resumption from squattages that a land-grant system of railway construction would involve. They, therefore, withdrew their allegiance from the Government and formed a third party. The Opposition was led by Mr. (afterwards Sir) Samuel W. Griffith, a gentleman who was at first favourably inclined towards the land grant railway scheme, but who afterwards opposed it most strenuously. The combination of the regular Opposition and the third party was able to defeat the Government, and the McIlwraith Ministry was succeeded by one led by the Hon. S. W. Griffith.

Before relinquishing his hold of the Colonial Treasurer's portfolio, Mr. McIlwraith made his historical attempt to seize New Guinea in 1883. Tired of long and vain solicitations to Lord Derby, then Secretary of State for the Colonies, to take formal possession of the island, he quietly instructed Mr. Henry M. Chester, the Police Magistrate at Thursday Island, to cross Torres Straits and on behalf of Her Majesty's Government in Queensland, to hoist the British Ensign and proclaim the annexation to the colony of that part of the island not claimed by the Dutch. This proceeding was not authorised by the Colonial Office, and after some hesitation the Imperial authorities repudiated the annexation. Lord Derby, however, in 1884, declared a British Protectorate over a part of unannexed New Guinea, and Germany thereupon seized the remainder. During the McIlwraith Government the Queensland and South Australian boundary was fixed by Messrs. Winnecke and Barclay, two surveyors who had been despatched by the South Australian Government in 1878 to reach the Queensland border from the transcontinental telegraph line. The expedition of 1878 was fruitless, but a second attempt in 1880 proved successful.

Sir Anthony Musgrave, G.C.M.G., who had previously governed South Australia from 1873 to 1877, relieved Sir Arthur H. Palmer of the responsibilities of administration on the 6th November, 1883. During the absence, on leave, of Governor Musgrave from the 19th April to December, 1886, the Government was again administered by Sir Arthur Palmer. During Sir Anthony Musgrave's régime several events of importance occurred. On the 1st October, 1884, one of those sensational "crushings" took place which tend to keep alive and fan to flame the gold-hunter's enthusiasm, no less than 2,249 ounces of the precious metal being obtained at Gympie from 107 tons of stone. The main political event of the year was the meeting at Townsville, the headquarters of the Separationists, of the Separation Convention, on the

10th April. The centralisation of power and influence in the Southern corner of the colony had been productive of discontent in the Central and Northern parts of Queensland, and for years intense agitation was carried on for the division of the territory into three, or at least two, distinct colonies, with separate responsible Governments. In order to promote the objects of the Separation League, a committee was formed in London on the 2nd October, 1885, and the work of agitation was vigorously proceeded with. Railway extension was now being pushed forward rapidly, and various sectional lines were opened and given over to traffic. On the 25th January, 1886, the first meeting of the Federal Council of Australia was held at Hobart, thus preparing the way for what was later on to take form in an earnest movement towards complete federation. Queensland was represented in this and all subsequent meetings of the Council.

Early in 1887 the Queensland Government appointed Mr. Clement Wragge to the position of Meteorological Observer, and from that time onward the regular publishing of meteorological data has proved of great advantage not only to the shipping interests of Queensland, but to Australia generally.

The beginning of the year 1888 saw railway communication between Sydney and Brisbane established. During the month of February disastrous floods occurred at Rockhampton, no less than 21 inches of rain falling in a space of time little over twenty-four hours in duration. In the fall of the year Dr. McGregor, appointed Administrator of NewGuinea proclaimed British sovereignty over the British section of the Island.

In 1888 the deaths of two prominent men occurred. The first was that of the Governor, Sir Anthony Musgrave, at the age of 60 years; the second, that of Mr. Frank C. Gregory, at the age of 68. Sir Anthony Musgrave died in office on the 8th October, universally regretted in the colony as a Governor of marked ability, and a gentleman of gracious social manners. Mr. Frank Gregory had accomplished excellent exploratory work in Western Australia. General Sir Henry Wylie Norman succeeded to the Government of Queensland on the 1st May, 1889, and continued in office till the 15th November, 1895.

A terrible marine catastrophe took place on the 28th February, 1890, when the R.M.S. "Quetta" struck upon an uncharted rock off the coast of Northern Queensland. She sank in a few minutes after striking, only 137 persons being saved out of a total of 283. The month of March, 1890, was exceptionally tempestuous. Extensive floods devastated large areas in Queensland and the northern districts of New South Wales, causing fearful damage to property. A terrific hurricane occurred at Townsville, and lasted two days, occasioning great loss of property, both in houses and shipping, and heavy rains and floods in both colonies were attended by serious losses.

The Morehead Ministry, which had succeeded that of Sir Samuel Griffith on the 30th November, 1888, came to a dramatic termination on 7th August, 1890, when it was saved from defeat on a want of con-

fidence motion only by two votes, the number of votes recorded being thirty-five to thirty-three. Five days afterwards the second Griffith Ministry was formed, and Parliament was adjourned until the 16th September.

The year 1890 saw something of a crisis in the industrial history of Australasia. On the 19th August the great maritime strike began in Sydney, and soon became general throughout the colonies. In a previous chapter dealing with New South Wales will be found a short account of the developments in the period of industrial warfare which was ushered in by this episode.

The Queensland Premier, Sir S. W. Griffith, so far entertained the proposals of the Separationist Party—or was so far swayed by their agitation—that he proposed, in the month of November, 1890, to divide the Colony into three semi-independent States.

In March and April, 1891, a parliamentary convention was held in Sydney for the purpose of drawing up a federal constitution. The work of the Convention is elsewhere described.

The squatters, but more particularly the planters, had ever kept a longing and interested eye on cheap alien labour, and it is possible that such industries as the growing of sugar-cane could not be conducted without it. The great bulk of the white labourers, however, held particularly strong views against the introduction of alien races of any kind, but especially of kanakas: and they received, therefore, with no good grace the remarks of Sir Samuel Griffith, when, speaking on the 18th March, 1892, at Maryborough, the centre of a sugar-cane growing district, he advised the re-introduction of Polynesian labourers. The representatives of labour in Queensland entered a vigorous protest against the proposals of the head of the Government, but this protest was of little avail, for, on the 14th April following, the Pacific Labourers (Extension) Bill passed both Houses of Parliament.

On the 14th September, 1892, Mr. Justice (afterwards Sir) William Windeyer proceeded to Brisbane at the invitation of the Queensland Government, and by special permission of the Government of New South Wales, and sat in the Supreme Court to adjudicate in the Queensland Investment Company's cases. On the 11th January Sir Samuel Griffith resigned his position as Premier of the Colony to become Chief Justice, the Right Hon. Sir Hugh Miller Nelson, P.C., undertaking the duties of Acting Chief Secretary until the arrival of Sir Thomas McIlwraith from Europe, which event followed on the 19th of the same month.

Terrific storms raged over a great part of Queensland on the 31st January, 1893, the rainfall registering from 3·18 to 4·8 inches in twenty-four hours. From the 4th to the 6th of the following month South-eastern Queensland was devastated by unprecedented floods, Brisbane and Ipswich suffering in particular. The Oxley and Victoria bridges in the metropolis were destroyed, the damage done to property in this city alone being estimated at £2,000,000. South Brisbane was completely isolated by the flood waters. On the 19th February there

was another phenomenal flood, not only in Brisbane, but in Grafton, Lismore, and other north-eastern towns of New South Wales, all telegraph lines north of Newcastle being interrupted.

On the 23rd February a Bill for laying a cable between Queensland and New Caledonia was adopted by the French Chamber of Deputies.

The banking crisis that afflicted Australia in 1893 did not spare Queensland. On the 15th May of the year mentioned the Bank of North Queensland and the Queensland National Bank both closed their doors, and, two days after, the Royal Bank of Queensland suspended payment. The Bank of North Queensland re-opened on the 31st July; on the 2nd August the reconstructed Royal Bank of Queensland followed.

As a direct result of the strike of 1890, a movement was set on foot having for its object the founding of a sort of communistic colony, where the settlers should be free from the strife and troubles incidental to existing social conditions. The leader of the movement was a Mr. William Lane, a Brisbane journalist, and he devoted himself with whole-souled energy to preaching the blessings of the new Promised Land, and collecting funds to enable the colony to be started. After much negotiation, the position of the settlement was chosen in Paraguay, in South America, and on the 16th July, 1893, the first detachment of New Australians left Sydney in the "Royal Tar." Other consignments of intending settlers sailed in succeeding ships; but, though the settlement is still in existence, it has, as is usual with such Utopian schemes, fallen sadly short of the ideals which led to its foundation. Some of the disillusioned emigrants were assisted by the Queensland Government to return to their old homes; others managed to get away without assistance, while those that remained were for the most part plunged in continual bickerings with one another. The latest available news gives the number of settlers now at Cosme as eighty-three, consisting of twenty-nine men, seventeen women, and thirty-seven children. The Government originally granted 25,000 acres to the colony, exempted the settlers from all direct taxation, appointed locally-nominated magistrates, established a postal service, and recently, through the State Bank, supplied, on favourable terms of repayment, machinery for the development of its resources.

The year 1893 was full of interesting events, though none of them of first importance. On the 23rd August a resolution was carried in the Assembly that the question of Separation of Central Queensland should be submitted to a referendum; on the 29th instant, a resolution in favour of a Bill raising the salaries of members from £150 to £300, though opposed by the Government, was carried in the Assembly by 27 votes to 22; on the 18th September, the Governor, Sir Henry Norman, declined the position of Viceroy of India; on the 25th, the bridge over the Logan River, South Queensland, sank bodily for nearly 3 feet while a train was passing over it; on the 13th October, stonewalling of the Sugar Works Guarantee Bill was resorted to all night by the labour

party, to prevent the employment of Asiatics in the mills—the Bill was ultimately read a third time and passed. Towards the close of the year, the cable connecting Bundaberg, Queensland, with New Caledonia, was opened for the transmission of messages.

The angry feelings which had culminated in the Great Strike, and those engendered by this industrial demonstation, urged men from time to time to acts of folly and recklessness. Free labourers were waylaid and maltreated; station buildings were burned down; and various other proceedings, partaking of the nature of serious outrage, were indulged in. On the 13th July, 1894, the Legislative Assembly unanimously carried a motion,—"That the time has arrived when Parliament should take steps to prevent industrial disputes." On the 11th September, while the Peace Preservation Bill was being considered in Committee, eight members were removed and suspended for one week. On the following evening, a public meeting was held to criticise the Parliamentary proceedings of the previous night, and a motion was carried condemning,—"The unconstitutional manner in which the Coercion Act has been forced through the Legislative Assembly by the Government and their supporters," and expressing sympathy with the suspended members. On the 12th, the Peace Preservation Bill passed through Committee, and the Opposition, with three exceptions, rose in a body and left the Chamber. On the 18th, the suspended members presented themselves in the House as a protest, but were conducted from the precincts of the Chamber by the Sergeant-at-Arms. On the 27th, seven members issued writs against the Speaker, claiming damages for assault, trespass, and false imprisonment, in connection with their suspension, and the first of these cases (Browne *v.* the Speaker) began on the 13th May of the year following. On the 14th November, 1894, the Legislative Council rejected the Payment of Members' Bill on a motion for the second reading by 24 votes to 2. On the 2nd March, 1895, an area of 1,500,000 acres of grazing farm land, hitherto unavailable, was thrown open in Queensland for selection, and attracted a large number of selectors, some of whom came long distances and from other colonies.

The year 1895, especially the earlier months, had been marked by some disastrous weather conditions, causing serious floods and loss of life, especially in the north-east coast districts. Early in the following year there were terrific gales and floods along the northern coasts of Queensland, which wrought considerable damage to shipping and other property. On the 13th February, 1896, a terrible accident occured at Brisbane through the capsizing of the ferry steamer "Pearl," twenty-eight lives being lost.

On the 27th March, Lord Lamington, Governor Designate of Queensland, arrived at Thursday Island; on the 9th April he was sworn in at Brisbane. Sir Henry Norman was appointed Agent-General for Queensland on the 25th November of the same year.

It has been mentioned that when Sir Samuel Griffith assumed the position of Chief Justice on the 27th March, 1893, he was succeeded by

Sir Thomas McIlwraith. On the 27th October, 1893, the Hon. H. M. Nelson became Premier, Sir Thomas McIlwraith occupying the position of Chief Secretary and Secretary for Railways in the Ministry. This Administration was succeeded in turn by one under the Premiership of the Hon. T. J. Byrnes, on the 13th April, 1898, and on the 1st October, 1898, the Hon. J. R. Dickson, C.M.G., assumed the Premiership. The Dickson Ministry lasted till the 1st December, 1899, when it was succeeded by a Labour Administration under the leadership of Mr. Dawson. The term of office of this Ministry, however, was exceedingly short, as it collapsed on the 7th December, 1899, on which date the Ministry of the Hon. R. Philp was inaugurated, and is still in office at the date of publication of this work. In July, 1900, one of the most notable figures in Queensland history passed away, in the person of Sir Thomas McIlwraith, who was Premier and Colonial Treasurer during the period from 1879 to 1883, and was also the head of the Ministry in 1888 and 1893. Amongst the more noteworthy of his political acts was the annexation of New Guinea, which, had it been confirmed by the Imperial Government, would certainly have prevented the firm foothold which Germany acquired not only in New Guinea but throughout the Western Pacific.

In the following table will be found a list of the Ministries which have held office in Queensland from the inauguration of responsible Government up to the date of publication of this volume:—

No. of Ministry.	Name.	Period of Office.		Duration.	
		From—	To—	Months.	Days.
1	Herbert	10 Dec., 1859	1 Feb., 1866	73	22
2	Macalister	1 Feb., 1866	20 July, 1866	5	19
3	Herbert	20 July, 1866	7 Aug., 1866	0	18
4	Macalister	7 Aug., 1866	15 Aug., 1867	12	8
5	Mackenzie	15 Aug, 1867	25 Nov., 1868	15	10
6	Lilley	25 Nov., 1868	3 May, 1870	17	8
7	Palmer	3 May, 1870	8 Jan., 1874	44	5
8	Macalister	8 Jan., 1874	5 June, 1876	28	28
9	Thorn	5 June, 1876	8 Mar., 1877	9	3
10	Douglas	8 Mar., 1877	21 Jan., 1879	21	13
11	McIlwraith	21 Jan., 1879	13 Nov., 1883	57	23
12	Griffith	13 Nov., 1883	13 June, 1888	55	0
13	McIlwraith	13 June, 1888	30 Nov., 1888	5	17
14	Morehead	30 Nov., 1888	12 Aug., 1890	20	13
15	Griffith	12 Aug., 1890	27 Mar., 1893	31	15
16	McIlwraith	27 Mar., 1893	27 Oct., 1893	7	0
17	Nelson	27 Oct., 1893	13 April, 1898	53	17
18	Byrnes	13 April, 1898	1 Oct., 1898	5	18
19	Dickson	1 Oct., 1898	1 Dec., 1899	14	0
20	Dawson	1 Dec., 1899	7 Dec., 1899	0	6
21	Philp	7 Dec., 1899	.....	...	...

SOUTH AUSTRALIA.

IN 1834 a Colonisation Committee, called the "South Australian Association," was formed. It consisted, in the first instance, of twenty-nine gentlemen, all of whom occupied leading positions, eighteen being Members of the House of Commons. A Bill for the colonisation of South Australia, promoted by this Committee, was introduced and passed the House of Commons with the support of the Secretary of State for the Colonies, and on the last day of the session of 1834 it received the Royal Assent.

The Act under which South Australia was founded empowered the Crown to erect "one or more provinces" in that part of Australia lying between the 132nd and the 141st meridians of east longitude, and between the 26th parallel of south latitude and the Southern Ocean. It further enacted that all persons residing within the said province or provinces should be free,—"not subject to the law or Constitution of any other part of Australia, but bound by only those which should be constructed especially for their own territory." The measure provided that the entire proceeds of sales of land in that portion of Australia should be devoted to the transportation of labourers from the mother country, but that no convicts should at any time be sent to this favoured colony; and that a Constitution should be granted to the inhabitants as soon as they numbered 50,000 souls.

As the Commissioners were restrained from entering upon the exercise of their general powers until they had invested £20,000 in Exchequer Bills, or other securities, and until land to the value of £35,000 had been sold, in order to secure the mother country from expense in founding and governing the new colony, there was some little hitch at the beginning of the new establishment, and fears were entertained as to the ability of the Commissioners to dispose of a sufficient quantity of land to realise the required sum. At the outset the price of land had been set at £1 per acre, and each land-order was for 80 acres of country land and 1 acre of town land; the price for the whole being £81. At about this juncture the "South Australian Company" was formed, under the inspiring direction of George Fife Angas, with a large capital, intended for employment in the progress and development of the colony. This association offered to purchase at once the remaining lots of land at an upset price of 12s. per acre. The

Commissioners accepted the proposition, but, in order to act fairly by their former clients, allowed those who had paid for 80 acres of land at £1 per acre to receive 134 acres at 12s. per acre.

To Edward Gibbon Wakefield belongs the merit of devising this new method of colonisation. The essential principle of his scheme was that land should be exchanged for labour, instead of being given away or alienated for a merely nominal sum. The colony should, in short, be self-supporting from the very first, and a revenue created by the sale of the waste or unappropriated lands within it, which revenue should be used as an immigration fund; the price of land should, moreover, be fixed sufficiently high to secure a constant supply of hired labour for its cultivation. In South Australia the land was sold in unconditional and absolute fee simple, without reserve for any purpose. The three fundamental principles upon which the colony was founded were self-support, anti-transportation, and the voluntary principle as applied to religion.

The required quantity of land having been sold, and the investment of £20,000 in Exchequer bills completed, the Commissioners began their arrangements for the founding of the colony. In the first place the Governorship of the new community was offered to Sir Charles James Napier—"the Conqueror of Scinde"; but this gentleman wanted a military establishment, and power to draw upon the Home Government for funds in case of emergency; and as the Colony was intended to be self-supporting, his demands could not, of course, be complied with. He thereupon declined the proffered honour, and Captain Hindmarsh, R.N., a bluff, typical British seaman, was gazetted to the post on the 4th February, 1836.

In the meantime the despatch of emigrants had begun, the first vessel, the "Duke of York," arriving on the 29th July, 1836, and casting anchor in Nepean Bay. The first person to set foot on shore in the new colony, was also the youngest member of the party, namely, the infant daughter of Mr. Beare, the second officer. Other vessels began to arrive in fairly quick succession; and Kangaroo Island being then better known than any portion of the mainland, steps were accordingly taken by the Company's agents to make the settlement there. On the 19th August, 1836, Colonel Light arrived at Kangaroo Island in the "Rapid," and at once assumed command of the expedition. His first work was the selection of a site for the settlement—a task he set about with unusual care. After examining Kangaroo Island and various places on the shores of the Gulf of St. Vincent, he turned his attention to Port Lincoln in Spencer's Gulf, but without discovering any locality suitable for the establishment of a large settlement. He ultimately decided upon the arm of the sea upon which Port Adelaide is situated, and here he fixed the site of the colony's chief town.

Governor Hindmarsh arrived in the "Buffalo" in Holdfast Bay on the 28th December of the same year, and at 3 o'clock in the afternoon, under the shade of gum-trees a short distance from the beach,

proceeded with the ceremony of the swearing in of himself, the members of his Council, and other officers, and the reading of his Commission to the settlers, of whom there were present about three hundred. The Union Jack was then hoisted with the usual accompaniment of a Royal salute; the marines who formed the Governor's escort fired a *feu-de-joie;* the "Buffalo," lying in the offing, saluted with fifteen guns; and the foundation of the Colony of South Australia was an accomplished fact.

From the inauguration of the new settlement there was a lack of cordial relations between the administrative bodies. The Governor, the resident Commissioners, and the Surveyors-General had each large and administrative powers, and in exercising them there was mutual interference, producing dissension and collision most injurious to the prospects of the colony. The leading subject of dispute was the site of the chief town of the settlement, the Governor and Judge Jeffcott and some of their friends, having regard to the commercial capabilities of the River Murray, wished the capital to be situated at Encounter Bay; others, again, bearing in mind its splendid harbour, voted enthusiastically for Port Lincoln. Colonel Light was inexorable. He had examined the coast carefully. Kangaroo Island and Port Lincoln had successively been abandoned on account of their unsuitability. Adelaide, in its present position, he considered an ideal site. The river Torrens flowed through it and supplied water in abundance, the surrounding country was level and fertile, well-timbered and well-grassed, and the elevation above the sea-level was well adapted for drainage. To meet the objections of those who said that Adelaide was too far from the sea to be a commercial centre, Colonel Light surveyed a secondary town called Port Adelaide, and the wisdom of this arrangement is now fully justified.

A great cause of complaint was found in the slowness with which the surveys were made, months elapsing before any selection of land could be completed; there was, in fact, no adequate means of transport to carry the surveyors and their camps from place to place, while, all the time, of course, nothing in the way of production could be attempted, and the arrivals from England had no homes to go to, but were obliged to camp wherever they could. The condition of the colony at this period is described as that of a continuous "picnic." In the meantime, Mr. G. S. Kingston, then second in command of the surveying staff, sailed to England to lay certain views before the English Commissioners for the purpose of expediting the surveys. His suggestions were adopted, and Colonel Light immediately resigned. This implied reprimand, however, so preyed upon his spirits, that he sickened and died in the following year. His remains were accorded a public funeral, and were buried in the public square that bears his name, and a monument was placed over his grave.

Captain Hindmarsh was continually embroiled with his subordinates throughout his term of office. He was a distinguished naval officer of

the old school, habituated to the employment of a most autocratic command, and as such was not well suited for a position of merely nominal superiority. Complaints were forwarded to the Secretary of State for the Colonies, Lord Glenelg, who wrote sharply to the effect that, upon his own showing, Captain Hindmarsh appeared "to be incapable of carrying on the government; with the exception of the Judge and the Harbour-master, he was, more or less, at variance with all the official functionaries of the colony." He was recalled in 1838, and Mr. George Milner Stephen was sworn in as Acting-Governor.

During Hindmarsh's term of office, a Supreme Court was established. On April 3rd, 1838, Mr. Joseph Hawdon arrived overland from Sydney with a mixed herd of 335 head of cattle. Soon after, Mr. E. J. Eyre arrived with another herd of 300 head, and Captain Charles Sturt (afterwards Colonial Secretary) with one of 400 head. At this point in the colony's progress the habitations erected were of the flimsiest materials. Government House was merely a reed hut, and most of the other dwellings were structures of a similar description. In January, 1839, the old Government House was burnt down, and nearly the whole of the executive and legislative records up to that date were destroyed. Cultivation continued to languish, and food was daily growing dearer. Flour was worth £30 per ton, beef 1s. a lb., tea 4s. a lb., and other things in proportion; and these prices were sometimes exceeded. The only watchmaker received 17s. for cleaning a watch. The Australian Company tried to carry on the whale-fishing, and for some years the only exports were whalebone and oil, but there was no external trade in either mineral, pastoral, or agricultural products.

Governor Hindmarsh's successor was Colonel Gawler, K.H., who arrived in the colony on the 12th October, 1838. When Governor Hindmarsh arrived in the colony the population was 546 souls; when he left it had increased to 2,377. When Colonel Gawler arrived there was a population of 3,680. The new Governor found the affairs of the colony in a deplorable condition, and he made strenuous efforts to evolve some show of order, but his headstrong actions only served to involve the settlement in still deeper confusion. The finances were in such a perilous state that in 1838, when the expenditure totalled £16,580, the revenue amounted to only £1,448. The people, too, instead of opening up the country, remained in the city; while of the rural holdings, which were in the hands of the proprietors, only about 200 acres had been devoted to the plough. The Governor did his best to get the people to proceed with the cultivation of the soil, and with some success. He projected extensive public works to provide employment for the landless, and had, of course, to incur a heavy expenditure. He drew upon the Home Government to meet current liabilities, and his bills were returned dishonored.

The revenue for 1839-40-41 amounted to £75,773; the expenditure during the same period was £357,615; thus leaving a deficit in the

public accounts of £281,842. In consequence of this, Colonel Gawler was recalled, and he was superseded by Captain George Grey, to whom Governor Gawler had extended the utmost consideration on his arrival in Adelaide some time previously, ill, and suffering from spear-wounds inflicted by the blacks.

There is little doubt, at this distance of time, that Colonel Gawler was treated by the Commissioners somewhat unfairly. They sent out shipload after shipload of emigrants, for whom their representative had to provide in some manner; but they did not furnish him with the wherewithal to do this. He believed in the province, and drew on its future. When he left, after three years of office, the population had more than doubled; the land under cultivation had increased from 86 to 2,503 acres; the sheep depastured from 28,000 to more than 200,000; and the export trade from next to nothing to over £100,000 in annual value. With Gawler's dismissal came a period of acute crisis. Confidence in the colony was not only severely shaken, it was well-nigh destroyed, and adverse criticism from without attacked its fundamental principles. For a time economists unhesitatingly pronounced the Wakefield scheme of colonisation to be a failure. The colonists, however, stood loyally by their departing Governor, and showed their sense of his integrity and ability by farewell addresses and a gift of £500; while the Duke of Wellington is reported to have said of him, on one occasion, "Gawler could not act otherwise than wisely, for he never did a foolish thing in his life."

Colonel Gawler personally took part in the exploration of the colony, and during his administration sent out various parties to discover land suitable for settlement. One of the most sensational efforts to penetrate the mystery of the interior was undertaken at this period. This was the great journey made by Mr. Edward John Eyre, in 1840, to reach Perth overland from Adelaide. After untold sufferings, the murder of his white companion by treacherous aboriginal servants, theft of provisions, and desertion, he accomplished 1,500 miles of travel along the coast-line, breaking at one point his monotonous journey when he fell in with, and was succoured by, a French whaling ship in command of Captain Rossiter. Refreshed by a long rest and abundant food, he ultimately reached Albany, after an absence of nearly thirteen months from Adelaide, where he had long been given up for dead.

The departure of Governor Gawler marked the conclusion of the experimental stage of colonisation. The office of the Commissioners in London had been abolished, and the Government of South Australia was vested in the Secretary of State for the Colonies. Captain Grey, the new Governor, was instructed to inaugurate the most drastic retrenchment, the sudden collapse of the financial credit of the province pressing with peculiar insistence on the attention of the British Parliament. A Select Committee was appointed to investigate the affairs of the struggling settlement, and an outcome of its report was a

vote of £155,000 as a loan to cover some of Colonel Gawler's bills. This amount was afterwards converted into a free gift. Besides this sum, £27,900 was loaned to the colony for the payment of Colonel Gawler's bills on the Colonisation Commissioners, and £32,646 to meet bills drawn by Captain Grey for the support of the "pauper immigrants," and to meet the interest on the bonded debt of the colony temporarily assumed by Great Britain. These amounts were repaid, and the debt due to the British Government was thought to have been extinguished in 1851; but, as late as 1887, a claim for £15,516 on account of interest was made against South Australia. Although the colony was not legally called upon to satisfy this demand, the amount was paid over, and with this incident terminated the monetary difficulties arising from Gawler's policy.

Captain Grey began his office as Governor of South Australia in a period of financial disaster, which his policy of retrenchment and taxation was alleged to have aggravated; hence his rule was intensely unpopular from its very inception. The colony was in a state of bankruptcy, and numbers of people were ruined beyond redemption. The colonists felt their troubles intensified by the cessation of that partial control over their own affairs which the previous Governor had allowed. The new Governor was the servant of the Secretary of State, and the province had practically become a Crown colony. It was ruled, under instructions from England, by Captain Grey and his Executive Council, the people having no voice in the imposition of taxation, or the expenditure of revenue. The Governor exercised his power to its fullest limit, but he certainly had an unpleasant and unpopular task to perform. His chief effort was directed to force an unwilling people to leave the town and settle in the country, and in this he had some slight measure of success. Before his arrival a Municipal Council of Adelaide had been elected, but Captain Grey found that it interfered with his independence of action, and he determined to get rid of it. As his relations with the Council became more and more strained, he questioned the legality of its acts and disregarded its suggestions, and finally the Corporation, which was the first ever established in a British Colony, became defunct. Grey's unpopularity continued to increase, and at a public meeting of the citizens his policy of taxation and retrenchment was denounced in unmeasured terms. The Governor was, however, inflexible, and showed that he was determined to adhere at all hazards to the line he had marked out for himself. As time wore on, things began to improve, and the relations between the autocrat and the settlers became more endurable, so that on the eve of his departure from the colony he enjoyed a measure of public favour which might, indeed, be almost regarded as popularity.

However much or little may have been due to Captain Grey's policy, there is no doubt that during his administration the colony passed through its darkest hour. Before the close of his term of office, pastoral products were found to be increasing, and agriculture was spreading

rapidly, but the prices of all staple commodities were low in the extreme. But at a time when sheep were being boiled down for their tallow, and wheat was worth but half-a-crown a bushel, the splendid copper-mines of Kapunda and Burra-Burra were successively discovered, and proved the salvation of the province. The only capital invested in Burra-Burra was £12,320; while the return in copper, before the workings were stopped in 1877, amounted in value to close upon five millions sterling. These valuable finds occurred very opportunely. The Home authorities had so little faith in South Australia's future, that Governor Grey was instructed to send to Sydney all the immigrant labourers then employed on Government works. The Governor took the responsibility of ignoring his instructions. He was aware that numbers of persons had already left for New Zealand and other settlements. He was aware also that the expense of deportation would be much greater than that which would be incurred by keeping the labourers employed at the cost of about £4,000 per quarter, and he advised the Imperial authorities to the effect that, had he at once sent all the immigrants away, the colony would have been irretrievably ruined, and the whole expenditure spent upon it utterly lost. He writes: "I should, in the first instance, have had to send away 2,427 souls—that is, one sixth part of the whole population; the fact of having done so would have made paupers of a great many more, who must have been removed in the same manner, and there would have been no labourers remaining in the colony to procure food for those who were left." When Captain Grey assumed office the population was 14,562; when he retired on the 25th October, 1845, it had increased to 21,759. The steady increase in the number of the people was one of the constant embarrassments of his position. Throughout his term of office the ordinary revenue was never equal to the expenditure, and recourse had constantly to be had to land sales, the proceeds of which were levied upon to meet current liabilities.

In 1840, in the time of Governor Gawler, there had been some trouble with the aboriginals, who had murdered the seventeen white survivors of a wrecked brig named the *Maria*; and two of the natives were court-martialled and summarily hanged. About nine months afterwards, in 1841, Mr. Inman, while overlanding sheep, was, with two drovers, severely wounded, while all the sheep, numbering some 7,000, were carried off by the aborigines who had attacked the party. Major O'Halloran was sent out with an expeditionary force to trace and punish the offenders; but was recalled in consequence of the censures passed on Colonel Gawler for his execution of the two murderers concerned in the *Maria* outrage. Thereupon some volunteers under Lieutenant Field, R.N., took up the enterprise. This second party of whites was surrounded by a body of natives, some 200 or 300 strong, and, after shooting some of their assailants, its members barely escaped with their lives. Another expedition was then organised in Adelaide, but Governor Grey intervened, and refused to allow it "to levy war or to exercise

any belligerent actions" against the offending blacks. A police party, consisting of an inspector and twenty-nine men, sent to the protection of some settlers in one of the disturbed districts, next encountered a tribe of disaffected aborigines. A conflict between the two parties took place, and thirty blacks were killed and about ten wounded. Although there was a strong disposition in certain quarters to blame the police, an official investigation resulted in their complete exoneration; but, to obviate as far as possible the occurrence of similar troubles in the future, Mr. E. J. Eyre was appointed Protector of Aborigines, and stationed at Moorundi, on the Murray. He soon secured the confidence of his charges, and from that time outrages by the blacks upon white travellers entirely ceased.

In the second year of Grey's administration, Captain Frome, R.E., Surveyor-General, led an expedition to examine the country round Lake Torrens, but did not penetrate far beyond Mount Serle, the country proving so inhospitable that he was forced to beat a retreat. Several other unsuccessful attempts were made to reach the centre of the Continent, but notwithstanding these failures, Captain Sturt was despatched, at the instance of the Imperial Government, on a similar quest. He left Adelaide on August 10th, 1844, and returned in March, 1846, having been absent for about nineteen months. This expedition was rich in discoveries of fine pastoral country now occupied by prosperous squattages; but it was made tragic, also, by the horrors of the Great Central Desert. The terrible privations of Captain Sturt so greatly affected his sight that he gradually became totally blind. He was granted a pension of £600 per annum by the South Australian Government, which he enjoyed until his death, in 1869.

On account of the trouble in connection with the Maori War, the Imperial Government, anxious to employ the proved ability of Captain Grey, sent him to New Zealand, and provided what was practically a *locum tenens* in Lieutenant-Colonel Frederick Holt Robe, who was suddenly summoned from the Mauritius, and assumed control of the colony on the 25th October, 1845. The administration of this officer, who was privately sworn in as Lieutenant-Governor only, was particularly colourless, his policy being chiefly confined to following in the footsteps of his predecessor. In the few instances in which Governor Robe took personal initiative, he invariably made mistakes; what he did was afterwards reversed, and what he refused to do was afterwards carried into effect. He imposed an impolitic royalty on minerals, which was soon abolished. In the face of strong opposition he devoted public money to the support of religion, and thereby stirred up a great deal of strife. He granted to Bishop Short, as the site for an Anglican Cathedral, an acre of land in Victoria-square, in the very heart of the city, close to where the General Post Office now stands; but the validity of the grant was successfully contested by the City Council on behalf of the citizens, in 1855, the Supreme Court deciding that the Executive had no power to alienate any part of the public estate. The Lieutenant-Governor also refused his consent to a proposal to

re-establish the City Corporation. Still, notwithstanding the weakness of his administration, the Colony, during his term of office, continued to prosper, and to recover the prestige it had lost with the collapse of the Gawler régime. Agriculture in particular had made important advances, its development being greatly assisted by the invention of improved wheat-harvesting machinery. Governor Robe held office until August, 1848, by which time the population had increased to 38,666, compared with 21,759 in 1845. The ordinary revenue had grown from £32,433 to £82,411 during the same period. The proceeds of the land sales, from the foundation of the Colony to the date of Colonel Robe's departure, amounted to £530,877.

Two years before Governor Robe's departure, Mr. J. Ainsworth Horrocks organised an expedition to solve the problem of the interior. Mr. Horrocks had been in the Colony since 1839, and had gained some experience in the work of exploration. He now, in 1846, proposed to cross the head of Spencer's Gulf, and travel north-west from the further side of Lake Torrens. The expedition, which had suffered greatly through want of water and the hostility of the natives, was, however, brought to a tragic close within a month from the date of its inception, by the accidental death of its leader.

On Major Robe's recall, Sir Henry Young was transferred from the Eastern Province of the Cape of Good Hope, of which he was Lieutenant-Governor, to take similar rank in South Australia. He had previously been Governor of Prince Edward's Island. Though not an administrator of remarkable ability, he fulfilled the functions of his office with considerable success, and the province, generally, prospered under his rule. The Colony is indebted to him, amongst other things, for the introduction of an extensive main-road system, and the institution of valuable local government organisations in the form of District Councils. In 1851, South Australia experienced a severe, albeit temporary, check in the exodus of population that followed the discovery of gold in Victoria. The attractions of the gold-fields almost denuded the province of its labouring population. Merchants, bankers, and all owners of property were reduced to the severest straits for lack of labour; mines stopped working, business enterprise was arrested, and all branches of industry came to a standstill. At this crisis, Attorney-General (afterwards Sir) Richard D. Hanson, at the suggestion of Mr. G. S. Walters, of the English and South Australian Copper Company, adopted a measure to make gold by weight a legal tender at a fixed standard value. The principle was incorporated in the Bullion Act; the overland escort was organised, and a portion of the wealth won from the Victorian fields by the South Australian diggers was diverted into their own colony, thus exercising a beneficial effect in the restoration of confidence in the resources and credit of the province.

Another event of great historical importance was the opening-up of the Murray River to steam navigation. Captain Cadell had descended the river from Victoria in a canvas boat, and this exploit had drawn

fresh attention to the value of the stream as a means of intercolonial communication, and a source of prospective profitable traffic along its course. Governor Young took a keen interest in the matter. Many accidents had happened at the mouth of the river, but the Governor believed that a good harbour might be constructed at Port Elliott, and a short tramway made thence to the Murray at Goolwa, distant 7 miles. He, therefore, procured the offer of a bonus to the man who should take the first steamer up the stream as far as the Darling Junction, and he himself accompanied Captain Cadell to Echuca, 1,300 miles, in the "Lady Augusta."

Prior to Captain Cadell's voyage up the Murray in the "Lady Augusta," Mr. William Randell had built a small steamer at Mannum, on the Murray, about 80 miles above Goolwa, and had steamed up the Murray, and for some distance along the Darling, but his craft did not fulfil the conditions which would entitle him to the reward.

In his Murray River projects, the Governor was undoubtedly too sanguine, not sufficiently taking into account the circumstance that the water supply of the Murray was variable, and that the eastern colonies also might have views with regard to the exploitation of any possible traffic. The tramway proposed by him was, however, constructed, and a sum of £20,000 was spent in constructing a breakwater at Port Elliott. "He believed and wrote," says one of his critics, "that it would become the New Orleans of the Australian Mississippi, but the money was literally thrown into the sea." The water-borne traffic of the Murray never greatly benefited South Australia, for when it began to grow to any appreciable volume it was promptly tapped by the Victorian railway system. Nevertheless, in the broad Australian sense, the passage of the first steamer up the river was a highly important historical event. Railways to the Port and northward were also initiated, but in consequence of the lack of experience in contruction, these cost the Colony enormous sums; in one instance 8 miles of line over level ground, with no engineering difficulties to surmount, and only one bridge to be built, involving an expenditure of nearly a quarter of a million sterling. It would appear, however, that a large proportion of the money spent was absorbed in providing work for the unemployed in order to relieve the labour market; the number of workmen employed on certain contracts in some cases being far in excess of actual requirements.

The Corporation of the City of Adelaide, whose powers had lain in abeyance for nine years, was revived by the Governor in 1851; but even before its revival a great alteration had been made in the political constitution of the colony. In 1851, the old system of Government by an Administrator and a nominee Council was abolished, and a legislature of one Chamber created in its place. This Chamber was composed of sixteen elected, and eight nominee members, four of the latter being Members of the Executive Council, and filling the chief official posts in the province. The other four were appointed by the Governor himself, subject to the approval of the Crown—though this was merely

a matter of form. The new Chamber was designated the Legislative Council, and exercised control over the expenditure chargeable to the general revenue of the colony; whilst the Governor, as representative of the Crown, possessed the disposal of all the income derived from the sale or leasing of public lands. Earl Grey, the then Secretary of State for the Colonies, was the inventor of this form of Colonial Government.

In 1853, the population of the colony numbered 79,000. In the Imperial Act, under which South Australia was founded, it was provided that the inhabitants might frame a Constitution for themselves as soon as they numbered 50,000 souls. In accordance with this provision, and about two years after the inauguration of Earl Grey's scheme of government, the Legislative Council passed a Constitution Bill, under which was to be called into existence, a Parliament, to consist of two Chambers—one elected by the people, and one to be nominated by the Governor as representative of the Crown, the members of the latter being appointed for life. The measure was sent to England for the Royal Assent; but the proposed new Constitution did not satisfy the colonists, and being strongly petitioned against, the Bill was referred back to the province.

Sir Henry Edward Fox Young was promoted to the Governorship of Tasmania, and left the colony to take up the duties of his new office on December 20th, 1854. Under his administration the land revenue increased from £32,935, in 1848, to £383,470, at the conclusion of his term of office. The general revenue increased for the same period from £82,911 to £595,356. The population, in 1848, was 38,666 persons; since that date immigration had added to the muster roll of the colony no fewer than 93,140, while the increase of births over deaths for the same period was 7,897; yet, so great had been the exodus during the gold-fever years, that the total population at the time of Governor Young's departure was only 92,545; many people, in fact, simply used South Australia as a free-passage stepping-stone to the Victorian gold-fields.

Sir Henry's successor did not arrive in the colony for six months, the Government being administered in the interim by the Hon. B. T. Finniss, who had, up to that time, been Colonial Secretary.

Sir Richard Graves MacDonnell assumed the reins of Government on the 8th June, 1855, and surrendered them on the 4th March, 1862; thus serving the longest term of all South Australia's Governors, administering the affairs of the province for a period only three months short of seven years. On his arrival the Governor found the province in the throes of military enthusiasm. The outbreak of the Crimean War, in 1854, had aroused fears of a Russian descent on Australia, and, in common with some of the sister colonies, South Australia made hurried preparations for such a contingency. A strong regiment of foot was enrolled, with a small force of cavalry, and three batteries of artillery, but the arms and equipment were extremely inadequate, while the defences of the port and shipping were almost entirely neglected.

With the conclusion of peace, however, between Russia and the belligerent powers, this sudden accession of military ardour rapidly evaporated.

The colony's affairs were now in a flourishing condition. It had a satisfactory revenue, and politically the only problem before it was the framing of a popular Constitution. After the general election, to ascertain the wishes of the colonists on this important subject, the estimates framed by the Governor were forwarded to the Legislative Council; but instead of being discussed in the ordinary manner, they were referred to a Select Committee composed of six elected members and one nominee. The Committee protracted its sittings for several months while it criticised the Governor's policy, the public service being carried on in the meantime by credit votes. When the Committee dispatched an address to the Governor requesting him to send revised Estimates to the Legislative Council, he replied in a trenchant and masterly manner, and thereby won over to his views the great bulk of the colonists.

The Constitution Act was introduced into the Legislative Council, where it was discussed and finally adopted, whilst the dispute was still proceeding between the Select Committee and the Governor over the Estimates. The Bill was passed in the last session of the old Legislative Council of 1855–6, and, receiving the Royal Assent, was in due course returned unaltered to the colony and proclaimed on the 24th October, 1856. The Constitution was modelled somewhat on English lines, the Parliament consisting of two Chambers, a Legislative Council and a House of Assembly, both of them established on the elective principle. The Upper House was chosen on the basis of a property qualification of electors; the House of Assembly was chosen on the basis of manhood suffrage. The qualifications of an elector for the Legislative Council were a £50 freehold; a lease, registered, having three years to run, or a right of purchase of the annual value of £20, or the tenancy of a house of the clear annual value of £25. Any natural born or naturalised British subject, who had attained the age of 30, and had resided in the Colony for three years, was eligible as a member of the Upper House, which consisted of eighteen members, elected for twelve years. The Council was not subject to dissolution, but one-third of the members were to retire at the end of every third year, the order of retirement being decided by ballot after the first elections had taken place. The members of the Upper Chamber were elected by the whole province voting as one constituency. The House of Assembly consisted of thirty-six members, elected on a basis of manhood suffrage under a registration of six months duration. The Lower Chamber was liable to dissolution by the Governor, failing which event its life was triennial. Members of the Assembly were elected for specified districts into which the colony was divided, and the mode of election for both Houses was by ballot, the principle of which was adopted at the instance of "the father of the ballot" in Australia, the late F. S. Dutton.

Sir Richard McDonnell had never been Governor of a colony with an independent Constitution ; yet it was under his auspices that the work of constitutional reform was completed. The Act materially altered his position, and he was not easily reconciled to the changed status in which he found himself. Under the new Constitution he was no longer able to act on his own initiative, but was under obligation to act on the advice of his responsible Ministers. For a while the Governor considered it to be his business to give advice to his Ministers, and to prescribe the policy of the Government; but he soon accepted a more correct view of the situation, and contented himself with the mere formal concurrence in the drafted policy of his responsible advisers.

The first Ministry, which was a makeshift one, lasted for less than four months ; the second, nine days ; the third, twenty-nine days ; and the fourth, two years and nine months. During the term of office of the last mentioned responsible Ministry, that admirable measure known as the Torrens Act, for simplifying the transfer of land, and for securing titles to it, was passed into law. It originated with Mr. (afterwards Sir) R. R. Torrens, whose experience, as Collector of Customs, in the transfer of shipping property, supplemented by the legal knowledge of European land legislation possessed by Dr. Hübbe, enabled him to frame a Bill so well suited to colonial conditions that the transfer of real property could be effected under its provisions with almost as much ease as the transfer of ordinary goods.

The railway connecting Adelaide with its port was completed and opened to traffic during the McDonnell régime, as well as the line from the capital to Gawler, and thence to Kapunda ; and a beginning was made in constructing lines for telegraphic communication. Mr. Charles Todd constructed his first telegraph line from Adelaide to the Port, but the immediate revenue therefrom was infinitesimal, a rival line opened by Mr. McGeorge a few weeks previously having captured most of the business. The Government, however, intervened, and bought out Mr. McGeorge's rights for a sum of £80, and caused the line to be removed. The next extension of communication was to Gawler. In less than three years the system had extended as far as Melbourne. To Sir Richard McDonnell the establishment of the works that furnish an excellent supply of water to Adelaide and the suburbs is also attributable ; and during his rule in 1861 the province gained an extension of territory (which has, however, never been of much real advantage) by the acquisition of a strip of country known as "No Man's Land," containing 80,000 square miles, and lying between the former boundary of the Colony and that of Western Australia, and carrying the western boundary of the province west as far as the 129th meridian of east longitude. The mining industry received a great impetus by the discovery of rich deposits of copper in Yorke's Peninsula, and many mines were opened, of which the most famous were at Wallaroo and Moonta.

In 1856, an engineer named B. H. Babbage, who had been employed on the City and Port Railway, and who professed to have considerable geological knowledge, was sent north to search for gold. He failed to find the coveted indications, but the three expeditions he conducted, and that of Warburton, who was sent out to recall him, added largely to the general stock of accurate information. In the year following Babbage's first expedition, Deputy-Surveyor-General G. W. Goyder was instructed to examine and survey the country which had been discovered by Babbage, Warburton, Swinden, and others, and returned with a glowing description of large fresh-water lakes, tall perpendicular cliffs, and so forth. The Surveyor-General, Captain Freeling, R.E., was at once sent to the scene of the alleged discoveries, but found nothing to justify his deputy's rhapsodical descriptions. It was very plain that Mr. Goyder had either been deceived by the mirage or misled by a rainy season. In June, 1858, John McDouall Stuart, who had been draughtsman with the expedition of Captain Sturt to Central Australia, began a series of explorations that eventually solved the problem of the interior, and culminated in the crossing of the Continent from south to north. He first made repeated examinations of the country between Lake Torrens and Lake Eyre, fixing a new base for northern exploration and discovering a more practicable route. Accompanied by a single white companion and a native, he penetrated as far as 28·20 south latitude, and 134·10 east longitude. In 1860 Stuart again set out, with the intention of crossing the Continent, and had penetrated the interior beyond Mount Denison (about as far north as 21·35 south latitude), discovering and naming Central Mount Stuart *en route*; but exhaustion, scurvy, general sickness, rapid decrease of provisions, hostility of the blacks, and above all, want of water, compelled him to beat a retreat for the settled districts, which he reached after suffering the greatest privations. On his return to Adelaide, the Government organised a fresh expedition and gave Stuart the command. With twelve men and forty-nine horses, he left Chambers' Creek Station on New Year's Day, 1861; but waterless desert and impenetrable scrub stayed the advance of his water-famished and exhausted party when within only 4 degrees of the northern coast, and he was again obliged to return. Once more he was sent north, and that within a month of his arrival in Adelaide. There was keen rivalry between South Australia and Victoria as to which would first reach the northern coast. Burke and Wills had already started, with the advantage of having a shorter route to traverse; but John McDouall Stuart had the knowledge, and experience won from defeat as well as from signal victory. The party left the settled districts early in 1862. On July 24th, of the same year, Mr. J. W. Thring, the third officer, riding somewhat in advance of the party, cried out, "The Sea!" Stuart's diary thus tells the story:—"The beach is covered with a soft blue mud. It being ebb-tide, I could see for some distance, and found it would be impossible for me to take the horses along it. I therefore kept them where I had halted them, and allowed half the party to come

to the beach and gratify themselves with a sight of the sea, whilst the other half remained to watch the horses until their return. I dipped my feet and washed my face and hands in the sea, as I promised the late Governor, Sir Richard McDonnell, I would do if I reached it. After all the party had spent some time on the beach, at which they were much pleased and gratified, they collected a few shells. I returned to the valley where I had my initials cut on a large tree (J.M.D.S.), as I intended putting my flag up at the mouth of the Adelaide." The explorers were royally received on their return to Adelaide. Stuart was given a grant of 1,000 square miles of grazing country and in all about £3,000 in cash. But he died in less than seven years. Crippled, half blind, and utterly broken down, he could struggle forward while work remained to be done, but the numberless privations he had suffered had made a fatal drain on his energy, and he rapidly sank when the battle was over.

When Governor McDonnell left the province, the population had increased to 126,830 from 92,545 in 1854. The revenue had expanded from £453,641, in 1855, to £558,587 ; the area of land under cultivation in 1853 was 129,692 acres, in 1862 it had grown to 320,160 acres ; the number of sheep depastured in the two years named were respectively, 1,768,724 and 3,431,000. In 1854 the imports were valued at £2,147,107 ; in 1862 their value had decreased to £1,820,656 ; whilst in the same period the exports had grown from £1,322,822 to £2,145,796.

Sir Richard McDonnell was succeeded in the Government by Sir Dominick Daly, without any interregnum of administration, the change being made on 4th March, 1862. Prior to his arrival in South Australia the new Governor had filled a similar position at Prince Edward's Island.

The first years of Sir Dominick's administration were troubled by the judicial imbroglio brought about by the persistence of Mr. Justice Boothby in regarding himself as the only lawfully appointed judge of the Supreme Court of South Australia. His appointment had been made by letters patent under the great seal of the province by Sir H. E. F. Young, and the exceptional character of the method in which he had received his office caused the judge to scout the claims of his colleagues and question the legality of their acts. Voluminous correspondence passed between the Governor, the Secretary of State for the Colonies, and Mr. Justice Boothby himself, and the quarrel seemed to be interminable. The whole question was so intermixed with constitutional difficulties that no finality could be arrived at. Vain efforts were made to enforce Judge Boothby's retirement, and he was ultimately proceeded against under an Act of George III, which, it was considered, would meet his peculiar case. However, his death which took place a few months after proceedings were initiated against him, brought this unpleasant incident to a close.

On the 6th July, 1863, the Northern Territory, or Alexandra Land as it was then called, until that time a part of the colony of New South

Wales was, by Royal Letters Patent, annexed to the province of South Australia, as a reward for the enterprise shown in the promotion of the exploring expeditions of Stuart, McKinlay, and others. It was thereupon resolved to found a settlement in this newly acquired domain, and extensive sales of land were immediately held. The first expedition, however, became disorganised, years rolled by while preliminaries were being settled, and the holders of land-orders clamoured for the refund of their payments. At this juncture Mr. Goyder was sent north, with a strong staff of surveyors, to lay out the settlement. He at once selected Port Darwin as the site of a capital, and there formed the ground-plan of the town of Palmerston. The further development of the interior was facilitated by Sir Thomas Elder's importation in 1862, of a breeding herd of 117 camels. It may here be remarked that the first camel introduced into South Australia had been used by the ill-fated Horrocks on his exploring expedition in 1846.

Towards the end of the year 1867, His Royal Highness the Duke of Edinburgh, in command of the "Galatea," paid a state visit to South Australia, and was entertained by the Governor. The royal visitor was received with the most enthusiastic demonstrations of loyalty, and, during his stay in Adelaide, performed the ceremony of laying the foundation-stones of the General Post Office and of the Wesleyan College which bears his name. Five months after the Prince's visit, the Governor, who for some time had been in feeble health, was attacked by a serious illness, and died on the 19th February, 1868. He was buried with military honors, no greater public demonstration ever having been witnessed in the colony.

During Governor Daly's rule, John McKinlay, the explorer, who had already distinguished himself by heading an expedition from Adelaide to Port Denison in Queensland in search of the remains of Burke and Wills, made a notable and perilous exploration of the Northern Territory, when the settlement formed there was in danger of total collapse. Part of the journey was performed in a punt made of saplings, over which the hides of slain horses had been stretched after the meat had been jerked for food. Both alligators and sharks, attracted by the smell of the raw hides, followed, and time after time nearly swamped the frail craft; but after days of danger and hardship the party safely made the entrance to Beatrice Bay. An almost equally perilous voyage was that undertaken by Mr. J. P. Slow in the "Forlorn Hope" from the settlement to Champion Bay, Western Australia—a voyage that added considerably to the knowledge of the country in the neighbourhood of the north-west coast.

On the decease of Sir Dominick Daly, the government was administered by Lieutenant-Colonel F. G. Hamley, of the 50th Regiment, the senior military officer on active service in the Colony, and he held the post of administrator until the arrival, twelve months afterwards, of the Rt. Hon. Sir James Fergusson, Bart. The new Governor took up the reins of office on the 15th February, 1869, and left the Colony for the

Governorship of New Zealand on the 18th April, 1873. During Colonel Hamley's administration, important changes took place in regard to the manner of disposing of the waste lands of the Crown. Prior to this, land had been sold at auction—a system which had created a class of persons known as "land sharks," who attended all Government land sales, and bid for and bought all they could secure, and kept it in the hope of receiving speculative prices from the people who required the land for genuine settlement. Settlement was restricted also by the formation of land monopolies favoured largely by the auction method of disposal. By the introduction of a new Land Bill, called "Strangway's Act," an attempt was made to remedy these abuses. Land was sold on credit, the full amount of purchase money being payable within four years from the date of the sale. The limit of selection was 640 acres. New evils, however, arose from the operations of the new Act—the common evils of all Australian land systems, the evasion of the residential provisions and "dummying"—but the general effects of the Act were distinctly beneficial.

An extension of the Northern railway to Burra, 100 miles north of Adelaide, took place during this period, and other schemes for improved internal communication were canvassed, but the greatest achievement under the Fergusson régime was the construction of the transcontinental telegraph line which connected Adelaide with Port Darwin, and consequently with London. The entire distance from the South Australian capital to the northern port is 1,975 miles, and for hundreds of miles at a stretch the interior was without a solitary white inhabitant. Large areas were absolutely destitute of timber, and no less than 19,000 iron telegraph poles had to be used. The line was begun simultaneously at each end, and in less than two years the wires had met, and were connected near the centre of the continent.

Sir James Fergusson had identified himself with all schemes for the advancement of agriculture, and took a most substantial and generous part in useful popular movements, but his claims to estimation as a far seeing statesman rest rather on his organisation of a bold public works policy, the carrying out of which has helped very largely to develop the productiveness and increase the wealth and prosperity of the province. After his departure Chief Justice the Hon. Sir R. D. Hanson administered the affairs of the colony till the arrival of Mr. (afterwards Sir) Anthony Musgrave, who assumed the reins of office on the 9th June, 1873.

Sir Anthony Musgrave's administration lasted till the 29th January, 1877, a term of three and a half years, during which period there was much political conflict and unrest. At the close of the session of 1874, Mr. James Penn Boucaut, one of the ablest lawyers and foremost politicians of the colony, emerged from the political conflict to power as Premier of a Ministry with a "broad and comprehensive" policy to place before the country. The dominant principle was the development of national resources on a regular plan, and at a cost of £3,000,000,

which Mr. Boucaut proposed to raise as a loan, the interest being provided for by the imposition of increased taxation in the form of stamp taxes and probate and succession duties. Twice the taxation proposals passed the Assembly, and twice were they rejected by the Council, and Mr. Boucaut refused to go on with his public works. His Ministry was removed by a non-confidence vote, and the Hon. John Colton was sent for. This gentleman formed a new Cabinet, and adopted the whole of the Boucaut policy except its proposed taxation. The sum of £3,000,000 was raised on loan, and various new railways were projected, all of which have since been constructed; the Probate and Succession Duties were adopted and became law, but the Stamp Act which had been contemplated was not proceeded with. The Boucaut policy of internal expansion and public works construction was for a series of years the chief political subject, and, indeed, long after Mr. Boucaut, through his having accepted a seat on the judicial bench, had ceased to have any direct connection with it.

Pending the arrival of Sir Anthony Musgrave's successor, Sir William Wellington Cairns, K.C.M.G., the Government was administered by Chief Justice Samuel James Way, who has often filled the same office. Sir W. W. Cairns, who was transferred from Queensland, remained in the colony less than eight weeks, and left behind him hardly a trace of his visit. The only public functions he performed during his stay in the province were the opening of the Victoria Bridge on 24th April, 1877, and his attendance at the inauguration of the Senate of the Adelaide University and the enrolment of its members. He resigned his office on the 17th May following, and the Chief Justice again became Administrator, and remained so for nearly five months. During the administration of the Hon. S. J. Way (July, 1877) the overland telegraph line to Western Australia was completed as far as Eucla, a small port about 160 miles west of the head of the Great Australian Bight.

Sir William Francis Drummond Jervois, C.B., C.M.G., R.E., arrived in Adelaide on the 2nd October, 1877, and remained in office till the 17th November, 1882. Sir William Jervois held the rank of Colonel in the Royal Engineers, and was Governor of the Straits Settlement when he was appointed to South Australia. He subsequently attained the rank of Lieutenant-General. Besides having distinguished himself as an officer, he was esteemed one of the greatest authorities on fortifications among European experts. He had had many and varied experiences in England, at the Cape, and in India, and afterwards filled the position of Governor of New Zealand.

Almost immediately after the new Governor's arrival, the overland telegraph line from Adelaide to Perth, connecting West Australia with the telegraphic systems of the other colonies and of the world, was completed. It follows the coastline for the most part along Eyre's track over 979 miles of that difficult country first traversed by the foot of white men hardly forty years before, and it joins the South Australian

system at Port Augusta. The next year the first sod of the transcontinental railway from Port Augusta to Port Denison was turned by the Governor, who opened 200 miles of it four years afterwards. At present the works on this line reach a point (Oodnadatta) 737 miles north of Adelaide. On 30th July, 1878, Sir William Jervois laid the foundation-stone of the Adelaide University; and on 12th June, 1881, the two young princes, Albert Victor and George of Wales, paid an unofficial visit to the colony, where they were well received.

Sir William Cleaver Francis Robinson, K.C.M.G., succeeded Lieutenant-General Sir W. F. D. Jervois on 16th February, 1883, and he remained in office a little over six years. The Governor was absent from the colony for short periods on seven separate occasions, and was represented sometimes by the Chief Justice and sometimes by His Honor J. P. Boucaut. Upon the departure of Sir William Robinson for Victoria on 6th March, 1889, the Chief Justice again administered the Government pending the arrival of the Earl of Kintore on 11th April of the same year.

The most noteworthy incident of the Robinson régime was the celebration of Her Majesty's and the colony's dual jubilees, fittingly commemorated by the opening of the South Australian Exhibition on the 21st June, 1887. The exhibition was a great success. It was kept open for six months, and was visited by 789,672 persons. The expense of erecting a permanent building which reverted to the Government, and a portion of which is now used as an Art Gallery, was £33,898, while the total cost of the exhibition was £68,702.

The exhibition was held at the conclusion of a time of severe financial crisis. The market values of all staple commodities had fallen ruinously; mines had become unprofitable and had been closed up; harvests had failed for want of rain; and the continued drought had involved stock-owners in heavy losses. A feverish period of land speculation had been followed by disastrous reaction, and hundreds of investors had been rendered penniless by the failure of the Commercial Bank, and the collapse of other joint-stock associations. Just, however, when they were most required, large metalliferous discoveries were made, the Teetulpa gold diggings giving employment to thousands, and above all, rich deposits of silver and tin were opened up in the Barrier Ranges in New South Wales, adjoining the South Australian border. Pastoral products, long depressed in value, began to rise, and the season of 1887 opened with an early and copious rainfall extending throughout the settled districts, and bringing with it an assurance of renewed agricultural prosperity.

The Right Hon. the Earl of Kintore, K.C.M.G., arrived in South Australia on the 11th April, 1889, and left his charge on the 16th January, 1895. Several South Australian Governors have taken a keen interest in the exploration of the interior. Notably among Vice-regal enthusiasts of inland discovery were Governors Gawler, Young, and MacDonnell, the last mentioned being particularly anxious to cross

the Continent. The realisation of this ambitious project was reserved for the Earl of Kintore who, in 1891, made the voyage to Port Darwin in the Northern Territory, and returned to Adelaide *via* the telegraph line route. He is the only Governor who has crossed the Continent from sea to sea.

Lord Kintore's successor, Sir Thomas Fowell Buxton, K.C.M.G., arrived in the colony on 29th October, 1895. From the date of Lord Kintore's departure until the arrival of Sir Thomas Fowell Buxton in October, the Government was administered by the Chief Justice, who had at the beginning of the year 1891, received a commission as Lieutenant-Governor of the Colony from Her Majesty. Two months after the new Governor's arrival the Federal Enabling Bill passed both Houses of Parliament. A novel experiment in Legislation, the State Advances Bill, was also passed into law, and a State Bank under the Act was established under it on 1st February, 1896. In July following tenders for mortgage bonds for the banks were opened; the amount required being £30,000 at 3½ per cent., while the total applied for was £59,600. The first four months of the year 1896 were marked by terrific gales, which wrought great damage to the shipping and other property; the 22nd February and 10th of April being two days of especial rigour and disaster. On the 25th April, the general elections throughout the province were held, and are noteworthy in marking the first occasion in the history of the colony on which women exercised their newly won right to the franchise. No less than 66 per cent. of the women enrolled voted. The Adult Suffrage Bill had passed through all its stages in committee on the 13th December, 1894; on the 9th of February following, a cablegram had been received from England announcing the Royal Assent; and on the 19th March of the same year, the assent itself had been received. The result of the elections showed that all the fears expressed by the opponents of the measure were wholly without foundation.

The Calvert expedition, rendered tragic by the death from thirst of two of its members, started out from Adelaide on the 23rd May, 1896. A more extended reference to this expedition will be found in the chapter dealing with Western Australia. On the 7th August, 1896, the Governor opened the Happy Valley Waterworks at Clarendon. The installation of this magnificent system involved an expenditure of £500,000.

The year 1897 opened dismally in the Northern Territory. On the 7th January a terrible hurricane, accompanied by two shocks of earthquake, and a storm that raged with unabated fury for several hours, practically destroyed the town of Palmerston, and inflicted damage and loss that would be underestimated at £150,000. During the following month the city of Adelaide also suffered severely from the effects of a storm, the suburbs being flooded and the intercolonial railway greatly injured.

The Imperial authorities had decided to appoint a Supreme Court Judge to the Judicial Committee of the Imperial Privy Council, and the selection fell on the Hon. S. J. Way, the Chief Justice and Lieutenant-Governor of South Australia, who received his appointment to the newly created post on the 22nd January, 1897. On 17th March following he left for England to fulfil the duties of his position, and on 19th June, in connection with the celebration of the Record Reign Jubilee, he received the honorary degree of Doctor of Laws from the University of Cambridge, and was subsequently, to the great pleasure of his fellow-citizens, created a baronet.

Pursuant to an arrangement arrived at with the other colonies steps were taken to appoint delegates to an Australasian Federal Convention. The election of members of the Convention took place in South Australia on the 14th March, 1897, the whole province voting as one constituency. The Convention opened at Adelaide on the 22nd of the month, the Premier the Hon. C. C. Kingston, being appointed President, and the Hon. Sir R. C. Baker, Chairman of Committees. The proceedings of the Convention are elsewhere described.

In 1897 several important names disappeared from the history of South Australia. On the 6th March one of South Australia's noblest-hearted benefactors passed away. This was Sir Thomas Elder, G.C.M.G., M.L.C. He it was who introduced a breeding herd of camels into the colony, and made the exploration of the interior practicable and possible. At his own cost he had fitted out several expeditions to open up the country. He established a Conservatorium of music in Adelaide, and, besides benefiting the province in a thousand ways during his life-time, left to be divided among the various public institutions of South Australia the noble bequest of £155,000. Another death was that of Sir Henry Ayers, G.C.M.G., a South Australian politician of many years standing, and a man closely identified with public affairs and the progress of the province. He died on the 11th June. On the 18th July the bodies of Charles Wells and George Jones, the ill-fated members of the Calvert exploring expedition, who had perished of thirst near Johanna Springs, Western Australia, were accorded a public funeral at Adelaide.

Little remains to be said in order to bring this brief historical survey to a conclusion. Sir Thomas Fowell Buxton left for England on the 29th September for a six months' holiday. On the 20th December he despatched a cablegram to Adelaide announcing his resignation, for family reasons. The Lieutenant-Governor again discharged the duties of administration until the arrival of Sir T. F. Buxton's successor, the Right Hon. Hallam Baron Tennyson who arrived in Adelaide on 10th of April, 1899.

In the following table will be found a list of the different ministries in South Australia from the establishment of Responsible Government

to the date of the publication of this volume; also the date of appointment to and retirement from office of each.

No. of Ministry.	Name.	Period of Office.		Duration.	
		To	From	Months.	Days.
1	Finniss	24 Oct., 1856	21 Aug., 1857	21	28
2	Baker	21 Aug., 1857	1 Sept., 1857	...	11
3	Torrens	1 Sept., 1857	30 Sept., 1857	...	29
4	Hanson	30 Sept., 1857	9 May, 1860	31	9
5	Reynolds	9 May, 1860	20 May, 1861	12	11
6	Reynolds	20 May, 1861	8 Oct., 1861	4	18
7	Waterhouse	8 Oct., 1861	17 Oct., 1861	...	9
8	Waterhouse	17 Oct., 1861	4 July, 1863	20	18
9	Dutton	4 July, 1863	15 July, 1863	0	11
10	Ayers	15 July, 1863	22 July, 1864	12	7
11	Ayers	22 July, 1864	4 Aug., 1864	..	13
12	Blyth	4 Aug., 1864	22 Mar., 1865	7	18
13	Dutton	22 Mar., 1865	20 Sept., 1865	5	29
14	Ayers	20 Sept., 1865	23 Oct., 1865	1	3
15	Hart	23 Oct., 1865	28 Mar., 1866	5	5
16	Boucaut	28 Mar., 1866	3 May, 1867	13	5
17	Ayers	3 May, 1867	24 Sept., 1868	16	21
18	Hart	24 Sept., 1868	13 Oct., 1868	...	19
19	Ayers	13 Oct., 1868	3 Nov., 1868	...	21
20	Strangway	3 Nov., 1868	12 May, 1870	18	9
21	Strangway	12 May, 1870	30 May, 1870	...	18
22	Hart	30 May, 1870	10 Nov., 1871	17	11
23	Blyth	10 Nov., 1871	22 Jan., 1872	2	12
24	Ayers	22 Jan., 1872	4 Mar., 1872	1	10
25	Ayers	4 Mar., 1872	22 July, 1873	16	18
26	Blyth	22 July, 1873	3 June, 1875	22	12
27	Boucaut	3 June, 1875	25 Mar., 1876	9	22
28	Boucaut	25 Mar., 1876	6 June, 1876	2	12
29	Colton	6 June, 1876	26 Oct., 1877	16	20
30	Boucaut	26 Oct., 1877	27 Sept., 1878	11	1
31	Morgan	27 Sept., 1878	24 June, 1881	29	27
32	Bray	24 June, 1881	16 June, 1884	35	23
33	Colton	16 June, 1884	16 June, 1885	12	...
34	Downer	16 June, 1885	11 June, 1887	23	26
35	Playford	11 June, 1887	27 June, 1889	24	16
36	Cockburn	27 June, 1889	19 Aug., 1890	13	23
37	Playford	19 Aug., 1890	21 June, 1892	21	16
38	Holder	21 June, 1892	15 Oct., 1892	3	24
39	Downer	15 Oct., 1892	16 June, 1893	8	1
40	Kingston	16 June, 1893	1 Dec., 1899	77	15
41	Solomon	1 Dec., 1899	8 Dec., 1899	...	7
42	Holder	8 Dec., 1899	.....	...	...

WESTERN AUSTRALIA.

WESTERN AUSTRALIA is the youngest of the seven sister colonies of Australasia; but, curiously, it shares with Queensland and the Northern Territory of South Australia the privilege of being first known to Europeans. As early as 1503 it is claimed that a French navigator, Binot Paulmyer, Sieur de Gonneville, was blown out of his course, and touched at some portion of the coast, but the evidence in support of the assertion is anything but conclusive. The Portuguese also lay claim to the discovery of the western coast at a later date. But it is to Dutch navigators in the early portion of the seventeenth century that we owe the first really authentic accounts of the western coast and adjacent islands, and in many instances the names given by these mariners to prominent physical features are still retained. By 1665 the Dutch possessed rough charts of almost the whole of the western littoral, while to the mainland itself they had given the name of New Holland. Of the Dutch discoverers, Pelsart was the only one who made any detailed observations of the character of the country inland.

It was reserved, however, for an Englishman, William Dampier, to make a more thorough examination of the country adjacent to the western coast, and he visited it on two occasions—once in 1688, when he was a member of a company of buccaneers who landed to repair their vessel, and later, in 1699, as an accredited explorer in charge of the "Roebuck." The history of his voyage, published by Dampier shortly after his return to England, represented the country as so barren and inhospitable that no idea was then entertained of utilising it for settlement.

During the interval elapsing between Dampier's two voyages, an accident led to the closer examination of the coasts of Western Australia by the Dutch. In 1684 a vessel had sailed from Holland for the Dutch possessions in the East Indies, and after rounding the Cape of Good Hope, she was never again heard of. Some twelve years afterwards the East India Company fitted out an expedition under the leadership of Commander William de Vlaming, with the object of searching for any traces of the lost vessel on the western shores of New Holland. Towards the close of the year 1696 this expedition reached the island of Rottnest which was thoroughly explored, and early the following year a landing party discovered and named the Swan River. The vessels then proceeded northward without finding any traces of the object of their search, but, at the same time, making fairly accurate charts of the coast line.

From this time onward the country was visited by various explorers; but the expeditions of Lieutenant King (1818-22) are the most noteworthy, inasmuch as this officer made very careful surveys of the whole of the western coast from King George's Sound to Cambridge Gulf, and continued his observations from this point along the northern shores of the Continent. King's work was so thoroughly and accurately done that his charts and sailing directions still form the basis of those in use at the present day.

Expeditions fitted out by the French Government had at various periods touched at the shores of Western Australia; and, in 1825, the presence of two French vessels, the "Thetis" and "L'Esperance," off the coast, roused the suspicion that France had designs on some portion of the Continent—a suspicion never altogether absent from the minds of the Colonial authorities. At this juncture, therefore, Lieutenant-General Sir Ralph Darling (Governor-General of New South Wales) sent Major Lockyer with a detachment of the 39th Regiment, and a small party of convicts, numbering in all some seventy-five or eighty souls, to found a settlement at King George's Sound. The harbour was selected in preference to a port on the west coast on account of its unique advantages as a naval base. Lockyer's expedition landed at the Sound on the 25th December, 1825.

Twelve months later (17th January, 1827), Captain Gilbert, in H.M.S. "Success," was despatched from Sydney to re-victual the infant settlement, and also to examine the Swan River, with a view to its occupation, the Imperial authorities fearing that they might be forestalled by the French. The "Success" had on board as a passenger Mr. Charles Fraser, the Colonial Botanist of New South Wales. On the 5th March, the expedition reached Rottnest Island, which was explored. On the following day the vessel anchored off the mouth of the Swan River. On the 7th March the "Success" was moored at Berthollet Island (now known as Carnac), and, on the following day, the first gig and the cutter, victualled for fourteen days, and well armed, proceeded up the Swan River, which was explored to its supposed source; the boats experiencing, however, some difficulty in crossing the shallows near the islands which now form part of the causeway. About 15 miles up the stream two gardens were planted, and friendly relations were established with a party of natives by means of presents. The cutter returned to the "Success," and left the gig to make a hasty exploration of another river, to which the French had given the name of the Moreau (now called the Canning), which survey was successfully carried out. The crew of the vessel was subsequently employed in surveying the islands of Rottnest, Berthollet, and Buache, and the neighbouring reefs. On the island of Buache itself was planted a garden, from which circumstance it probably derives its present name of Garden Island; and a cow, three sheep, and three goats were placed thereon. On the 21st March, 1827, the "Success" sailed for Geographe Bay, where she arrived three days afterwards. On the 2nd April King George's Sound was

made, and the settlement planted there was found to be in anything but a satisfactory condition. Leaving the Sound on the 4th April the vessel dropped anchor in Port Jackson on the morning of the 15th. Captain Gilbert and Mr. Fraser both seem to have been highly impressed with the capabilities of the country around Swan River. Indeed, so encouraging were the reports made by the members of the expedition, that a settlement at the Swan River was finally resolved upon by the Imperial authorities on the earnest recommendation of Governor Darling; and Captain James Stirling, who appears to have been His Excellency's personal representative to the Home Government, was sent to England to receive instructions, and to take charge of the work of organising the expedition, should it be determined upon. In the meantime, about April, 1829, to Captain Fremantle, of H.M.S. "Challenger," who had been despatched for the purpose by Commodore Schomberg, of the Indian Squadron, was entrusted the hoisting of the British flag, and the taking possession of the newly-examined country. Captain Fremantle thereupon proceeded to the coast, and anchored off the Swan River. On the 1st June, 1829, he hoisted the British flag on the north side of the stream, at the locality which now bears his name, taking formal possession in the name of His Majesty King George IV, of "all that part of New Holland which is not included within the territory of New South Wales."

It would appear that Captain Stirling reached England in 1828, for the first Order in Council having reference to the Swan River settlement is dated in the month of December of that year. This Order, for the encouragement of emigration to the new colony offered advantageous terms to persons proceeding to it, at their own expense, during the currency of the year 1829. The Home Government, indeed, refused to incur the cost of a single passage or to undertake the maintenance of emigrants on their arrival in the new land, or their subsequent removal from it if such should be found necessary; but all persons who should arrive before the end of the year 1830, according to a later Order in Council, were promised grants of land, free of quit rent, in proportion to the capital introduced by them, to be invested in the improvement of their holdings, at the rate of 40 acres for every sum of £3 invested—or, 1s. 6d. per acre; choice to be made of situation in the order of arrival. The invested capital was scheduled to comprise:—(1) Stock of every description; (2) all implements of husbandry, and other articles applicable to the purposes of the productive industry, or necessary for the establishment of the settler on the land where he was to be located; (3) the amount of any half-pay or pension received from Government. Persons who imported labour were entitled, for the passage of every labouring person brought into the Colony, to land to the value of £15—namely, 200 acres; the introducer of labour being, however, liable, in the event of such necessity, for the future maintenance of the work-people introduced. This privilege applied to women, and to children above 10 years of age

—these being classed simply as labourers. A condition was attached that any of these conceded lands, which at the end of twenty-one years had not been sufficiently reclaimed, or satisfactorily improved, should revert absolutely to the Crown. As already stated, the first Order in Council dealing with emigration to the Swan River settlement limited the land privileges to the currency of 1829; the later Order extended the time for the issue of free grants until the end of 1830. But, apparently, the original offer was considered to be more liberal than expedient, as, according to the second Order, it was declared that selection licenses could be granted to settlers on proof of value of property imported, but the fee simple could not be obtained until proof was given that the sum of 1s. 6d. per acre had been expended in the cultivation of the land, or in other solid improvements. It was further stipulated that all granted lands were, within three years of occupation, either to be cultivated or otherwise improved, to a fair proportion of at least one-fourth, or the owners would be liable to the payment of 6d. per acre into the public chest; and should the lands, at the end of seven years, still remain in a state of nature, they were to be forfeited absolutely to the Crown. After the end of the year 1830 further modifications of the free-grant system were introduced, and before long it was totally abolished, land being subsequently obtainable, by purchase only, at varying rates. The land regulations under which the first settlement of the colony was effected, however, largely influenced its early history; and the result of their application is felt even at the present time.

The tempting offers made by the Imperial Government of grants of land, large and small, in proportion to the amount of property introduced, attracted many capitalists, and the consequence was that extensive tracts of the finest territory were granted to purely speculative investors. The efforts of the Colonial Office to obtain emigrants for the Swan River settlement were, therefore, successful beyond all anticipation; the eager competitors for property absolutely given away, knowing, of course, comparatively nothing of the character of the country in which they proposed to settle, or of the hardships, difficulties, and dangers that must of necessity beset them.

The first vessels to sail from England for the settlement at the Swan River were H.M.S. "Sulphur," having on board a detachment of the 63rd Regiment of Light Infantry, and the hired transport "Parmelia," which carried the emigrants and the principal part of the stock and implements. The two ships left England about the 13th or 14th February, 1829. On the 6th June following the "Parmelia" anchored in Cockburn Sound, having on board Lieutenant-Governor Stirling and his family; the Colonial Secretary, Mr. Peter Brown; the Surveyor-General, Lieutenant Roe, R.N.; their wives and families; Mr. and Mrs. H. C. Sutherland, Mr. George Eliot, and other intending settlers, numbering in all sixty-nine. Two days later arrived H.M.S. "Sulphur," having on board Captain F. C. Irwin, in command of a

company of the 63rd Regiment, comprising a staff officer, three subalterns, two sergeants, three corporals, a bugler, and forty-six rank and file. Having left a party of about half its strength to protect the stores, settlers, etc., on Garden Island (Buache), the remainder of the force debarked on the 17th June and encamped on the north bank of the Swan River (now Rous Head), relieving the party of seamen and marines from H.M.S. "Challenger," which had been left in charge of the British flag planted there by Captain Fremantle on the 1st June. With the landing of the immigrants from the "Parmelia" the history of Western Australia begins.

After the "Parmelia" followed the "Calista," the "St. Leonard," the "Marquis of Anglesea," and within eighteen months some thirty other vessels, carrying to the settlement over a thousand immigrants, representing, it is said, £100,000 in money, stock, or goods, on account of which, before the year 1830 had ended, claims for more than a million acres in free grants of land had been presented. Up to the 31st December of the year mentioned there had arrived in the Colony, as nearly as can be reckoned, and without counting the detachment of troops and their families, about 1,767 persons, bringing with them stock represented by 101 horses, 583 head of cattle, 7,981 sheep, 66 pigs, 36 goats, and a variety of poultry. Between the 1st September, 1829, and the 30th June, 1830, the value of the property introduced, upon which land was claimed, amounted to £73,260 8s. 3½d., equal, at 1s. 6d. per acre, to 976,805 acres of freehold land, while miscellaneous property, inapplicable to the improvement of land, had been imported to the value of £21,021 2s. 7d., making a total value of £94,281 10s. 10½d.

The best land was appropriated on the free grant system so rapidly and so prodigally that persons arriving within a few months of the first settlement of the colony could find no land available within easy access of the two rivers—Swan and Canning—along whose course settlement was then only possible. There were, of course, at this time no made roads, and the bush tracks consisted solely of dry, heavy sand. Water carriage was, therefore, the sole means of transport for produce. The only way to obtain land in an accessible position, and suitable for agricultural purposes, was for a new arrival to take over a portion of a block already in occupation, guaranteeing to the grantee to perform sufficient work in the way of improvements on the part taken, as to secure the whole concession—the remainder of the property, in such a case, in all probability would be left permanently in a state of nature. In course of time, and as the result of inability to cope with unaccustomed conditions, numerous would-be settlers left the Colony in disgust, but they still retained possession of the immense tracts of land granted to them; hence population was thinly scattered over a wide area, the pick of the territory being unprofitably locked up.

From these re-emigrations it will be seen that many of the earliest settlers were persons entirely unqualified for pioneer life and the

hardships of existence confronting those who essay to "rough it" in a new country. The first immigrants, indeed, comprised mainly gentlemen of culture and good position, their tenderly nurtured families, and indentured servants and agricultural labourers. They included among them retired officers of the Army and Navy, professional men, civil servants, and some of the younger sons of English families of wealth and high social standing. It is not to be wondered at, therefore, that these settlers, landing as they did in a most inclement season, and wholly unprepared for the rude experiences they had to undergo, should have sent home reports of a most gloomy and discouraging nature.

In due course, also, but gradually, it was found that the expectations formed as to the fertility of the soil had been far too sanguine. Food became scarce, and pastoral and agricultural operations languished from want of capital to stock and to till the lands. To these drawbacks were added large losses of stock from disease or from eating the poison plant, and it became apparent that the young colony could only with the greatest difficulty maintain itself independent of outside assistance. As a last disaster came serious trouble with the natives. Not only were their houses robbed by their dusky foes, their crops torn up by the roots, and their cattle speared, but even the lives of the disheartened settlers were daily in danger, and it was all but determined on one serious occasion to abandon the infant settlement; indeed, but for prompt action by the Governor, things would have gone ill with a section of the colony from this menacing source. Between Bunbury and Garden Island, Peel's Inlet is the only break in the monotony of the low sandhills which fringe the coast. On the banks of the River Murray, a stream of some importance flowing into this backwater of the ocean, Mr. Peel, one of the earliest of the first settlers, established himself in days gone by, and here, at the small hamlet of Pinjarrah and in its neighbourhood, a small and scattered population is still maintained. This place is memorable in the history of Western Australia as the scene of the most serious of the many skirmishes which in the first few years of settlement took place between the colonists and the aborigines. In the year 1834 the members of the Pinjarrah tribes had committed atrocious murders on several of the few white residents in the district, and in the month of October the Governor, Sir James Stirling, accompanied by Mr. Peel and several other colonists, put himself at the head of a party of military and police, and coming upon the culprits in large numbers on the banks of the Murray, some 10 miles from Peel's Inlet, he engaged them, and after a smart skirmish put them to flight. In this locally celebrated "Battle of Pinjarrah" a considerable number of natives were killed, and several of the settlers more or less seriously injured. The result was, however, that outrages and depredations on the part of the natives almost wholly ceased, and that friendly relations between them and the white population ultimately grew up.

Captain Stirling, the superintendent of the first colonising expedition, was, before departing from England, created Lieutenant-Governor, and a promise was made that a Bill would be submitted to Parliament to make provision for the Civil Government of the new colony, which promise was duly fulfilled when, on the 14th May, 1829, "An Act to provide until the 31st day of December, 1834, for the Government of His Majesty's Settlement in Western Australia, on the Western Coast of New Holland," received the Royal Assent. The officials appointed comprised a Secretary to the Government, a Government Surveyor and Assistant Surveyor, a Harbour-master, a Deputy Harbour-master and Pilot, a Superintendent of Government Farms, Gardens, and Plantations, a Superintendent of Government Stock, a Storekeeper, a Civil Engineer, a Registrar, and a Surgeon—a list strikingly eloquent of the primitive and patriarchal nature of the first settlement, in which several of the functions usually left to private individuals were provisionally discharged by Government.

On the 8th June, 1829, the Lieutenant-Governor issued a warrant for the establishment of a Board of Commissioners, who should examine into and report upon such matters as might be referred to it relative to the management of the property within the settlement, and for the purpose of auditing and passing all public accounts, and demanding, receiving, and duly apportioning all fines, fees, and forfeitures accruing or becoming due to the Government. The Board, as first constituted, consisted of the Harbour-master, Captain Mark J. Currie, R.N., as presiding commissioner; together with the Government Surveyor, Lieutenant John Septimus Roe, R.N.; and Mr. William Stirling, the lastnamed acting also as registrar and secretary *pro tem.* This body was called the Board of Council and Audit.

By an Order in Council, dated the 1st November, 1830, the first Executive Council of the Colony of Western Australia was constituted. The Order in question, after settling the Constitution of the Council, declared its authority and power to make, ordain, and establish all such laws and ordinances, and to constitute such Courts and officers as might be necessary for the peace, order, and good government of His Majesty's subjects, and others, within the settlements. In the constitution of the Executive Council, as set forth in the Order of November, 1830, no change took place until June, 1847, when, under the authority of a Royal Order in Council, the Collector of Revenue was appointed an Executive Officer.

Notwithstanding the fact that a good number of the early settlers had returned to England or departed to the eastern colonies, where the conditions of life were less rugged, steady progress was made by those who remained. The towns of Perth and Freemantle had been much improved, while settlement was extending on the river flats. Higher up the river, farms and gardens had been laid out, and at Guildford the husbandmen brought out by Mr. Peel were turning the rich soil to profitable account. On the upper Swan River; on the Canning, to the

south; over the hills, at York; on the River Murray; at Augusta, and at King George's Sound,—settlement was industriously spreading. Governor Stirling, in a despatch to Sir George Murray, G.C.B., then Secretary for State for the Colonies, writes of the colonists about this time as working with a cheerful confidence in the qualities of the country, and a general belief in its future prosperity; and for a time the young settlement really did progress with a slow yeomanlike steadfastness.

In comparison with the eastern colonies, however, which progressed by leaps and bounds, Western Australia seemed to advance with very halting gait. Still, it must be remembered that the western colony was the victim of a peculiar set of circumstances. In the first place, as previously mentioned, the early colonists were not the best fitted for pioneer work in a new country. Then, again, the colony was in an isolated position, cut off by 2,000 miles of unknown country from the eastern settlements, and rarely visited by the ocean carriers of commerce. The discoveries, too, of valuable mineral deposits which had brought wealth and progress to the eastern colonies, had yet to be made in Western Australia. Moreover, the land, except in comparatively restricted areas, was barren, and in many places infested with a plant which poisoned flocks and herds feeding on it, while nearly all the best land was locked up in large grants, owned by persons who were for the most part at little pains to develop them. However, despite all these drawbacks, the small community of settlers was, generally speaking, so united, and consisted of people of such cultured tastes, that the earlier years of the colony's history were socially the brightest.

Captain James Stirling, R.N., who held the rank of Lieutenant-Governor, administered the affairs of the settlement from the 6th June, 1829, to September, 1832. The next Lieutenant-Governor was Captain Irwin, the Commandant of the Forces, who continued in office till the month of September, 1833. Then followed Captain Richard Daniell, up to May, 1834, when for a fortnight the colony was administered by Captain Picton Beete, Daniell resuming control of affairs and continuing in office till August, 1834, at which date Captain Stirling (now Sir James Stirling) entered upon his second term, this time as Governor with full rank, which closed at the end of the year 1838.

In the meantime the free-grant land system of settlement, which had been inaugurated with the first days of colonisation, had been working out in anything but a satisfactory manner. Magnificent estates had been lavishly squandered upon propertied immigrants during the first few years of the colony's existence, and the splendid territorial munificence of the Government soon began to show its retarding influence in the country's progress. All the best land, the "eyes" of the districts watered by the Swan, the Canning, and the Avon, as well as the finest patches in the vicinity of the more southern settlements, were gone beyond recall. It is now recognised that if the conditions originally imposed in the making of these grants had been rigidly insisted upon

no abiding mischief might have been inflicted upon the young colony. The Orders in Council, under which the Governor was empowered to act, offered land in extent proportioned only to capital invested in the colony for purposes of absolute improvement. Practically, however, grants of land were made for any and every kind of property the immigrant who imported it might choose to make a claim for in the form of acreage. Even articles of furniture, art, and plate, were assessed as valuable accretions to the colony's wealth, and acknowledged in donations carved from the public estate. Again, the occupation obligations were carried out neither in the letter nor in the spirit. It is recorded that full and unconditional titles were readily obtained, and that over a million acres of the best portions of those districts which, from the nearness to the chief township and the seaport of the colony, might most easily have been brought into profitable cultivation, became "locked up" in a huge land monopoly. When the poorer emigrants—the labourers and the mechanics, and such servants as had achieved freedom from their indentures—sought to establish themselves upon the soil, they found that they were shut out from these very areas where their enterprise and their labour would have been most productively and usefully applied.

Sir James Stirling gave up the reins of Government at the end of the year, 1838. He was succeeded by Governor John Hutt, whose administration lasted from January, 1839, to December, 1845. The next Governor was Lieutenant-Colonel Andrew Clarke, from February, 1846, to February, 1847. Then came Governor Lieutenant-Colonel Irwin, from February, 1847, to July, 1848, and Captain Charles Fitzgerald, from August, 1848, to June 1855; and the term of office of the last-named officer ushers in a new era in the history of Western Australia. When the colony was founded, the Imperial authorities had made an agreement with the first settlers that no convicts or prisoners were to be transported to the new settlement, as was the case with regard to New South Wales and Tasmania. Some twenty years had rolled by, and Western Australia numbered close upon 7,000 inhabitants; 4,000 acres had been brought into cultivation, sheep had increased to 140,000, cattle to 11,000, imports had reached a value of £45,000, and exports £30,000. Nevertheless, the struggle to make a living was becoming harder and harder, trade was languishing, labour was difficult to obtain, and immigrants did not appear to find the country attractive enough to bring them thither—a result, doubtless, of the manner in which the land was locked up in big estates. "Widespread depression prevailed amongst the colonists, and at last, though with dire misgivings on the part of many, they decided to petition the Home Government for the introduction of convicted prisoners, hoping thus to obtain cheap labour, an abundant expenditure, and a market for their cheap produce." The colonists of Western Australia had no difficulty in gaining a complaisant answer to their petition; for, at this juncture, the Imperial authorities were feeling the pressing necessity of having some oversea settlement suitable for the deportation

thereto of criminals. The first batch of convicts was landed at Fremantle on the 1st June, 1850. Transportation to the colony was continued for about eighteen years, during which time some 10,000 members of the criminal class were added to its population. In the earlier years of the "transportation system" the convicts who were landed in Western Australia did not by any means belong to the worst type of criminal. Some of the shipments, indeed, were selected with special care, and with a view to meeting the requirements of a labour-starved colony. Although there was undoubtedly a sprinkling of hardened villains, a great proportion of those sent out consisted of agricultural labourers who were transported for some petty infraction of the game laws. Prisoners of this class were of great use during their term of sentence, and later on developed into an excellent body of settlers.

Governor Fitzgerald retired from office in June, 1855, and was succeeded in the administration by Arthur Edward Kennedy, afterwards Sir Arthur Edward Kennedy, and Governor of Queensland. Kennedy's term of office came to an end in February, 1862; for ten days or so the Government was administered by Lieutenant-Colonel John Bruce, as Acting-Governor; and then John S. Hampton, took over the control of the colony.

The complaints against the use of bond labour in injudicious directions which were frequently made in Governor Fitzgerald's time disappeared with Hampton's assumption of office. His admirers declare that there was an absolute change for the better all round. He had qualified himself for the position of Governor of a penal settlement by holding an office of authority in Tasmania connected with the convict system of that colony. He was a stern disciplinarian, and was able to gauge to a nicety how to get the maximum of work from the human muscle, and how to employ convict labour to the best advantage. He set to work with a will to improve the colony's means of communication, and succeeded so well that it has been said of him: "The remembrance of Mr. Hampton's administration is perpetuated in miles upon miles of macadamised road, in the covering of many a heavy sand-stretch with well-laid metal, and in bridges and causeways innumerable over river and swamp, from one end of the settled districts to the other."

Governor Hampton surrendered his office in the month of November, 1868, and with the termination of his régime the era of convictism was closed; but with the cessation of transportation, and the maintenance of prison labour, passed away also the large Imperial expenditure—although the withdrawal was gradual. The settlers at first felt this rather keenly, for though willing enough to be cleansed of the convict "taint," they were far from pleased at the loss of its solatium in currency. The "system" had reigned in the Colony for about eighteen years; and the settlers' expectation of material advantage accruing from its continuance in their midst had been

fairly satisfied. Nevertheless, beyond giving cheap labour, and a large circulation of money, transportation had done nothing for the general advancement of the colony, and had rather fostered than removed its chief bane—isolation. Transportation had ceased in the case of New South Wales in 1849; in that of Tasmania, in 1852; it had never been introduced into Victoria, South Australia, and (since its birth as a colony) Queensland. The eastern and southern colonies, therefore, looked askance at the distant western settlement.

After the conclusion of Governor Hampton's term of office, the colony was administered, from November, 1868, to September, 1869, by Lieutenant-Colonel John Bruce, the Commandant of the Forces, as Acting-Governor. Frederick A. Weld, was the next Governor, and he ruled the Colony from September, 1869, to December, 1874. During his *régime*, and by an order of the Queen in Council, dated the 3rd April, 1871, the Executive Council was remodelled. The Governor remained President; the Colonial Secretary, the Attorney-General, the Senior Officer in command of the Land Forces, and the Surveyor-General retained their seats, whilst those of the Comptroller-General and Collector of Revenue were abolished.

Governor Weld, who had been trained to political and public life in the progressive and restless colony of New Zealand, saw with dismay the condition of stagnation in which Western Australia seemed perfectly contented to remain. He had been accustomed to a country which enjoyed a considerable measure of freedom and prosperity. Filled with enthusiasm, he conceived it to be his duty to break down the barriers which shut in the colony from intercourse with the outside world, as well as to provide more adequate means of communication between the centres of settlement within it. His first task was to arrange for regular steam communication between Albany, the Vasse, Bunbury, Fremantle, and Geraldton. This was the beginning of a trade which steadily grew, and later on all the intermediate ports between Albany and Cambridge Gulf enjoyed the advantages of a regular and efficient steam service. The Governor next turned his attention to the question of telegraphic communication, and in spite of the apathy of the colonists on the subject, had the satisfaction, before his departure, of seeing all the principal centres of population connected by telegraph lines. The closing act of this energetic Governor and true benefactor to the people whom he governed, was the planting of the first pole of the line of wire which has since brought Western Australia into direct communication with the other colonies of Australasia and with the world. During Mr. Weld's term of office he made a strong attempt to move the colonists in the direction of railway construction; though this could not, considering the colony's limited resources, be carried out on anything like an extensive scale at that time, he had the satisfaction of seeing a beginning made with two distinct railway systems, one commencing at Geraldton and the other at Fremantle.

Western Australia owes much to Mr. Weld's practical and progressive administration. In addition to the works already alluded to as carried out during his term of office, various industries, notably mining, were developed ; a partially representative Legislature was established; municipal institutions were introduced ; an Education Act was passed ; and important explorations were successfully conducted by Mr. John Forrest.

It must not be forgotten, howevever, that useful explorations had been previously carried out, and had greatly furthered the extension of settlement. As far back as the year 1831, Captain Bannister had made an overland journey from Perth to King George's Sound, and his track afterwards became the regular overland route.

In 1837 Lieutenant Grey (afterwards Sir George Grey) set out on an expedition, having for its objective the north-west and western portions of the continent, and although the work was hindered by the opposition of the natives, and by sickness among the exploring party, important additions were made to geographical knowledge. Then Lieutenant Roe, Surveyor-General of the Colony, made several journeys eastward, and he was followed by various other explorers, but their discoveries were not of great practical utility. In 1839 Grey set out on his second expedition northward, and on this occasion again the members of the party suffered great hardships. Grey claimed to have discovered the Gascoyne, Murchison, Hutt, Bower, Buller, Chapman, Greenough, Irwin, Arrowsmith, and Smith Rivers, but the difficulties and privations met with on the expedition prevented him from making any detailed surveys of his discoveries.

Edward John Eyre's tremendous effort to march round the head of the Australian Bight, with a single black boy, in 1840–1, belongs rather to the history of South Australia than to that of Western Australia. Nevertheless, his exploratory expedition was of value in giving a more thorough and detailed knowledge of the geography of the coast of the latter colony, than that before possessed.

The colonists of the Swan River settlement believed that although their little colony was encircled by a belt of desert land, beyond the desert lay rich agricultural and pastoral country. Various efforts were from time to time made to penetrate this surrounding waste. In 1843 Messrs. Landor and Lefroy made a short excursion from York, but nothing tangible resulted from their exploration. Again, in 1846, three brothers named Gregory set out from Bolgart Spring, the farthest stock-station eastward, with the object of discovering fresh pastoral land. The country passed over in their eastward journey was found, however, to be barren and inhospitable, and interspersed here and there with numerous salt lakes. The explorers next turned their attention to the streams crossed by Grey in his disastrous expedition to Shark's Bay, and, at the head of one of these, the Arrowsmith, a seam of coal was discovered.

Another expedition eastward, in charge of Lieutenant Roe, who was accompanied by Mr. H. C. Gregory, set out on the 14th September, 1848. Beyond making further additions to the stock of geographical knowledge, the result of the expedition was unsatisfactory. In December of the same year Governor Fitzgerald, accompanied by Messrs. A. C. Gregory and Bland, proceeded to the scene of the discovery of coal already alluded to. During this expedition a serious conflict arose with the aborigines, in the course of which the Governor was wounded by a spear. In 1858 Mr. F. Gregory made important discoveries of excellent pastoral lands on the banks of the rivers previously crossed by Grey, and his expedition added greatly to geographical knowledge. In 1861 another expedition, led by Mr. F. Gregory, made Nickol Bay, on the north-west coast, the starting point of its explorations. This expedition was very successful, discovering several important rivers, amongst others the Fortescue, Ashburton, De Grey, Oakover, &c., and opening up some splendid pastoral country. Mr. Walcott, who was second in command, also discovered the existence of the pearl-shell beds, which have since proved such a source of income to the Colony.

It was not long before enterprising pastoralists occupied the newly-discovered pasture lands. Mr. Padbury, in 1863, sent the first shipment of stock to Butcher's Inlet, and thence occupation rapidly spread eastward to the De Grey River. Subsequently an attempt was made at forming a settlement at Roebuck Bay, but the hostility of the aborigines, coupled with bad seasons and misfortunes generally, led to its abandonment in 1867.

In 1864 a small settlement was established at Camden Harbour, the country round which had been reported as very suitable for colonisation. But from its very inception nothing but disaster was met with, the grass proved unsuitable for stock, the poison-plant was found in abundance, the colonists themselves suffered from ill-health, and the natives were very hostile, Consequently it was decided to abandon the settlement, and the decision was acted on in 1865.

In the tract of country, known as the "Nor'-West," which lies between the De Grey and Ashburton Rivers, there were grouped, by the end of 1867, the original pioneers of the district, some later arrivals, and the remnant of the Roebuck Bay and Camden Harbour experiments. To these must be added the members of a company formed in Melbourne, in 1865, to settle A. C. Gregory's recently-discovered Denison Plains. The colonists of the "Nor'-west" suffered many hardships in the early days of settlement. The decline in the price of wool, and the large expenses coincident with the maintaining of a Colony so far removed from the basis of supply proved a heavy strain on their original resources. But later on, with the advent of more favourable seasons, and the rise in price of wool, prospects became brighter, and this division now ranks among the finest pastoral areas in the Colony.

In 1869 Mr. (afterwards Sir) John Forrest made his first exploration, in the course of which he penetrated 250 miles farther eastward than

any previous explorer, but the country passed over proved to be extremely inhospitable. Mr. Forrest was next given command of an expedition which had for its object the traversing of the country between Perth and Adelaide, along the shores of the Great Australian Bight. In this expedition he proved that the desert surrounding the tall cliffs of the inlet did not extend for any great distance inland, where, indeed, he met with fine pastoral country, although the absence of permanent surface water proved a great drawback. In 1871 he made a second journey in search of new pastoral country. The one important circumstance made known by these expeditions was the absence of any river which it was thought might have been unwittingly crossed at its mouth by Eyre in 1840.

The tract of country between the Transcontinental Telegraph Line and the Western Settlements now became the area of the keenest exploratory attention. In 1872 Ernest Giles led an expedition from South Australia to the westward but his progress was stayed by the large dry salt lake, to which he gave the name of Lake Amadeus. In a further expedition his comrade, named Gibson, lost his life in the desert, since known as Gibson's desert.

In 1873 an expedition was fitted out by Messrs. Hughes and Elder, the command of which was entrusted to Colonel Warburton. After suffering incredible hardships the party managed to reach the head of the Oakover River, but the results of the expedition were disappointing. In the same year a party, under the leadership of Mr. Gosse, discovered fine pastoral country in the vicinity of the Marryat and Alberga Rivers, but the barren nature of the country precluded exploration to the westward.

One of the most remarkable journeys in the annals of Australian exploration was that undertaken by Mr. John Forrest in 1874. Colonel Warburton had succeeded in crossing the desert, albeit naked and starving when he reached the coast. John Forrest determined to accomplish the feat, and to accomplish it on more prudential and more successful lines. With this object in view an expedition was fitted out, comprising John Forrest as leader, his brother Alexander, two other whites, and two natives, with ordinary pack and saddle horses. On the 14th April, 1874, the party left Yuin, then the furthest outside station on the Murchison River. For the first six weeks there was little to record. The route lay along river-courses and through well-grassed country. When the explorers struck eastward they were fortunate in discovering some fine wells. Their agreeable experiences lasted until they got into the spinifex country, and then their troubles commenced. On the 8th June the leader started with one black boy to look for water, leaving instructions for the party to follow up in a few days' time. The two travelled 20 miles over undulating sand-hills clothed with spinifex, but were unable to find the priceless fluid. From the top of a low stony rise the view was gloomy in the extreme. Far to the north and east it was all spinifex country, quite level

and destitute of water. They turned back and met the remainder of the party a few miles from the spring at which they had been camped. A retreat was beaten, and the entire expedition fell back upon its former oasis. A day was taken to rest in, and then Alexander Forrest and a black boy went forth on a quest for water towards the south-east. During their absence the natives made an unexpected attack upon the camp, but they were repulsed after a desperate struggle. Alexander Forrest and the black boy had travelled over 50 miles from camp, and, though they had passed over much good grazing country, they had found no signs of water. The explorers now set to work and built a rough hut of stone, in order to ensure safety from the blacks during the night; for their stay at Weld Springs seemed likely to be indefinite, and a fresh attack might be expected at any moment. When the hut was completed, Forrest, taking with him a black boy, started out on a flying journey due eastward. This time they were fortunate in finding a small supply in some clay waterholes, and the whole party thereupon removed to this locality. On the 22nd June the leader started on another quest ahead, and 30 miles distant found a fine supply of water in a gully running through a grassy plain, where there was abundant fodder for the horses. Eight miles to the southward was discovered a small salt lake, to which was given the name Augusta. On the 30th June, John Forrest, while exploring ahead and searching for water, pushed far into the spinifex desert with his horses "knocked up." By the aid of scanty pools of rain-water in the rocks, he managed to push on for some distance, walking most of the way. He reached a range, and from its summit had an extensive but discouraging view. Far as the eye could pierce, the horizon was as level and as uniform as the sea—everywhere spinifex; no hills or ranges loomed in the distance. It was disheartening in the extreme. From time to time this experience was repeated. The supply of water was as precarious as it was priceless. Sometimes one of the brothers, sometimes the other, would find a sparse quantity in the rock-hollows and clay-pans of the desert. Sometimes both would fail. Now and again the finds of water were copious, as in the case of Wandich, Pierre, Weld, and Alexander Springs. Generally, however, they were scanty, and rapidly exhausted. Eventually the explorers got into country which, though anything but desirable as pasture land, nevertheless yielded them water. Here they were within a hundred miles of Gosse's "furthest" westward; and to span this short distance proved a weary work. Repeated excursions resulted only in repeated disappointments and "knocked up" horses. At last a generous shower of rain filled some rock-holes to the north-east of their camp, and after much exertion the whole party managed to reach an old stopping-place used by the explorer Giles, and named by him Fort Mueller. By this time they were also on Gosse's tracks, and the leader was able to congratulate himself upon the successful accomplishment of his task. From this point to the Transcontinental

Telegraph Line the route is practically that followed by Gosse, and on the 27th September Forrest struck the wire some distance north of the Peake Station, thus concluding a most valuable expedition in a highly satisfactory manner. On his arrival at the station Forrest learned that Giles and Ross had both turned their backs upon the inhospitable country which he had traversed in safety and with success.

The history of Western Australia is the history of a succession of pastoral settlements following in the wake of successful exploration, and in this connection it may be remarked that not one of the other colonies presented such terrible natural obstacles to the progress of the pioneer. As settlement extended Government residents were appointed to the charge of various districts with executive and legal functions, the chief law officer being styled Commissioner of the Civil Court. The Civil Service was expanded gradually, but during the first forty years of the colony's history the system of Government underwent little change. There was little desire during this period for administration of a more popular type. The Governors were anxious to learn the wants of the colonists and where possible to meet them. They maintained personal relations of a friendly social description with the leading settlers, and the views and the expressed wishes of the upper classes had full weight in determining the policy of the Government. The populations of the towns were too small to originate democratic ideals, or to agitate for constitutional reform. It is, of course, obvious that during the convict period personal government was almost a necessity; but no sooner had transportation ceased than political aspirations began to awaken, and the people evinced a desire to partake more directly in the management of their affairs. In the year 1870 Governor Weld was allowed to introduce a Constitution in which the Executive remained practically the same, but it was assisted by a Legislature, two-thirds of the members of which were returned by the constituencies into which the colony had been divided. This system of administration appears to have been well suited to the circumstances of the country at that time, and, in conjunction with municipal institutions, road boards, and boards of education (which were simultaneously established), served to prepare the people for the exercise of more advanced self-governing powers.

Up to the time of Governor Weld's arrival the Colonial Secretary had held a position practically little removed above that of the Governor's Chief Clerk, but to Mr. F. P. Barlee, who then occupied the post, the new administrator extended a far greater measure of confidence than had been enjoyed by any of the Secretary's predecessors, Mr. Barlee being permitted to assume a virtually ministerial position. When the time approached for the Governor's departure, the Chief Secretary, being desirous of keeping the measure of influence which he had gained, conceived the idea of becoming Premier under a form of Responsible Government. With this end in view he gained over the Governor's support to the scheme, and also enlisted the sympathies of several of the more prominent members of the Legislative Council.

Accordingly, in 1874, resolutions were passed urging the Governor to introduce a Constitution Bill conferring Responsible Government upon the colony. To this His Excellency gave his consent, but differences of opinion arose as to the details of the measure, and the Legislature was dissolved.

Governor Weld continued in office until December, 1874, and was succeeded by William C. F. Robinson, in the month of January in the year following. Upon the meeting of the new Legislative Council resolutions were again adopted expressing a desire for Constitutional change, to which eventually a discouraging reply was received from the Colonial Office. Governor Robinson had received instructions to throw cold water on the movement, but his task was by no means easy until the departure of Mr. Barlee from the colony. The Colonial Secretary, dissatisfied, as he expected to be, with the restricted position in which he found himself with an administrator of the old school, took leave of absence, and subsequently accepted the Government of Honduras. With the withdrawal of its energetic leader, the Responsible Government Party collapsed.

During the early part of Governor Robinson's term of office a noteworthy exploratory journey was made from South Australia at the expense of Sir Thomas Elder, and under the leadership of Ernest Giles, who had twice previously been driven back in his efforts to cross the great Western Australian desert. The expedition set out from Beltana, and travelled to Youldah where a depôt was formed. From the latter place the explorers started on their long and toilsome journey, and eventually reached an out station in Western Australia on the 4th November. From this point Giles retraced his steps to the Transcontinental Telegraph Line, following a track to the northward of the route traversed by Forrest.

Governor Robinson's term of office was extremely uneventful. Instead of stimulating the activities of the colonists, and leading the progressive party as Governor Weld had done, Robinson sought to restrain and modify their ambitions and aspirations. His administration concluded in August, 1877, and for some four months Lieutenant-Colonel Edward Douglas Harvest controlled the affairs of the Colony until the arrival of the new Governor, Major-General Sir Harry St. George Ord, in November of the same year.

The new Governor soon found that public opinion had drifted strongly towards responsible government not from any great dissatisfaction with the local policy pursued by the Governor and his advisers, but rather by reason of the restraints which the policy of the Colonial Office imposed upon a forward movement in local affairs. In the Legislative Council a motion in favour of Responsible Government was again brought forward. It was rejected, but only that an amendment might be substituted plainly intimating that it would soon become impossible to stem the movement if the Secretary of State for the Colonies continued the existing practice of interfering and thwarting the popular longing

for progressive measures. The Governor took advantage of a visit paid by the Hon. John Forrest to England to make, through that gentleman, strong representations upon the mischievous tendency of this obstructive policy. The result was that the officials of the Colonial Office gradually lessened the frequency of their intervention in the affairs of the Colony, and authority for several much needed railway works, hitherto held back, was granted and the requisite loans sanctioned. These grievances assuaged, another soon arose respecting the lack of control possessed by the House of Legislature over the expenditure of public money. No real power rested with the representatives of the people in this matter. Estimates indeed were passed, but as a mere matter of form. What moneys the Government thought fit to spend they spent; the Legislature was powerless to prevent them. However, no accusations of wild extravagance could be brought against the Governor and his Executive. They spent no more than they deemed necessary in the interests of the public service. But by making themselves independent of the House for their requirements they completely deprived that body of the power which it would necessarily have exercised had it controlled the public purse. The colonist had, however, to wait for a time in patience for the guardianship of the finances.

Early in 1879 Western Australia sent out another of the exploring parties which formed such a feature, indeed, the salient feature, of her history. The leadership was given to Alexander Forrest, who had accompanied his brother John on two of his great journeys into the interior. Funds were provided by the Government, and horses and equipments by the "Nor'-West" settlers. Alexander Forrest, with a small party, left Anderson's station, on the De Grey River, with a view of proceeding overland to King's Sound, and thence of penetrating through the Kimberleys to South Australia. The expedition set out on the 25th February, 1877, and reached Beagle Bay on the 10th April. Success of the most gratifying character attended this trip, though during its latter part the explorers were subjected to great hardships and privations. Leaving Beagle Bay the party followed the coast round to the Fitzroy River (which empties into King's Sound), and journeyed along the course of that stream, tracing it to its point of emergence from the fastnesses of the Leopold Range, and examining the rich pasturage of the adjacent alluvial flats. The Leopold Range for a time barred further progress, so a return was made to the Fitzroy River, and by following up an affluent named the Margaret the explorers were enabled after a time to work round the foot of the range. Shortly after this a fine river was discovered and named the Ord, and this stream was followed to its junction with the Negri, where they left it and continued their way to the Telegraph Line, passing through fairly good country. After leaving the Victoria River the privations of the party commenced, and Forrest and a companion named Hicks pushed on alone, and eventually met a repairing party from which they obtained supplies for their companions. This trip must be considered as one of

the most important in the annals of West Australian exploration, as the country opened up has since been stocked with sheep and cattle, and large mineral wealth has also been developed. The Government Geologist, who accompanied the party, gave it as his opinion that gold-bearing strata would be found in the country lying at the head waters of the Fitzroy and Ord Rivers, and after events have shown the correctness of his surmise.

Major-General Sir Harry St. George Ord was succeeded in the month of April, 1880, by Sir William Cleaver Francis Robinson, who therewith entered upon his second term of office as Governor of Western Australia.

In 1881 a further loan was raised for carrying out the construction of the Fremantle, Perth and Guildford Railway. The first loan was obtained in 1879, but a third was necessary in 1883, and with the proceeds of these loans much was done to extend the railway facilities of the colony, and the Government was able to claim that it had brought every centre of population in the eastern agricultural areas into direct railway communication with the capital and its port. A great deal was expected from the completion of these lines in regard to increased settlement and agricultural expansion; there was, however, very little of either.

In 1883 the Hon. John Forrest, who had succeeded Mr. (afterwards Sir) Malcolm Frazer as Surveyor-General, sailed for Derby, a port in the West Kimberley District, accompanied by several parties of surveyors, and by Mr. E. T. Hardman, of H.M. Geological Survey of Ireland. The object of this expedition was a further and more extended examination of the two Kimberley Districts, and the carrying out of the surveys that had now become absolutely necessary. During this journey the country between the Leopold Range and the coast was examined, its rivers explored, and its geological formation noted and charted. The only metalliferous deposits, however, observed by Mr. Hardman on this trip were ironstone, a poor hematite in large quantities, and in the gravels of the Fitzroy River, minute, dark, heavy grains, which had all the appearance of stream tin.

Sir William Robinson's second term of office as Governor concluded on the 17th February, 1883. Until the 2nd of June of the same year the colony was administered by Chief Justice H. T. Wrenfordsley, and then arrived Sir Frederick Napier Broome who ruled the country some six and a half years.

In 1884 Mr. H. Stockdale set out on an exploring expedition with the object of examining the country in the neighbourhood of Cambridge Gulf. Leaving the Gulf and crossing the range through a natural gap, to which the leader of the expedition gave his own name, the explorers came upon a well-grassed and watered region. Later on the fine stream known as the Lorimer was discovered. Stockdale afterwards reached the Transcontinental Telegraph Line, but two of the party, who refused to proceed and were left behind at a camp with supplies of provisions, were never afterwards heard of.

The year 1884 saw much attention devoted by the Western Australian Government to an examination of the two Kimberleys. By that time it had become apparent that settlement on the river Ord and its tributaries must find an outlet at Cambridge Gulf instead of at Derby, the shipping port for the squattages bordering the Fitzroy, the Lennard, and the Meda Rivers. Accordingly, it was to Cambridge Gulf that Staff-Commander Coghlan, of the Admiralty Survey Department, proceeded. He reported favourably upon the capabilities of the inlet for meeting the requirements of shipping. Meanwhile, Mr. Surveyor Johnstone had been despatched to Derby, accompanied by an efficient staff, Mr. Hardman being again included in the party. Upon this expedition Mr. Johnstone, crossing the watershed of the Fitzroy River, passed Mount Barrett and followed the river Elvire and the river Ord to the junction of the latter with the river Negri. During the course of this exploratory survey, the geologist found good specimens of copper ore on the Margaret River, and of tin stone in the black sands of several of the streams. Lead also was noted in limestone rocks in the form of galena associated with zinc blende, and showing small traces of silver. Of non-metalliferious minerals, gypsum, agate, chalcedony, garnet, amethyst, opal, pink and yellow topaz, and other gems were discovered, but the chief interest of Mr. Hardman's researches centred in his statements of the gold indications he had found, and of the prospects of unearthing the precious metal in payable quantities. Two thousand square miles of the country through which he passed he declared, in his opinion, to be auriferous in a payable degree. Mr. Hardman made a full report on the Kimberley country, which concluded with the statement that, on the whole, the indications he had met with pointed almost with certainty to the eventual justification of the name of "Terra Aurifera," erroneously said to have been given to these districts centuries ago by the navigators who first landed upon their ironbound coasts.

In 1888-9 Mr. Ernest Favenc explored the headwaters of the Ashburton and Gascoyne. Three important tributaries of the Ashburton were discovered, the Cunningham, Jackson, and James, and splendid pastoral country was opened up. In 1896 Mr. S. Wells, chief of the Calvert Exploration Expedition started from Lake Way to examine the country lying between the Fitzroy and East Murchison Rivers. During this expedition two of the party, Mr. C. F. Wells and Mr. G. Lindsay Jones, lost their lives. In the same year Mr. A. Mason examined the country between Kurnalpi and Eucla, and claimed to have discovered rich pastoral country poorly supplied, however, with surface water. A portion of the area explored had been previously traversed and similarly described by Sir John Forrest in 1870.

On 20th July, 1896, an expedition equipped and led by the Hon. David Carnegie left Doyle's Well, 50 miles south of Lake Darlôt, to search for auriferous or pastoral country in the great desert lying between latitudes 19° and 28° south, and longitudes 122° and 129°

east, which had hitherto only been crossed from east to west, or *vice versâ*. The country passed over was in general extremely inhospitable. One result of the expedition was the proving of the impracticability of a direct stock route between Kimberley and the North Coolgardie fields.

While the "Eastern Railway" was being built, the Government of Western Australia, on the motion of the Legislative Council, made it known that the colony was open to receive offers for railway construction on the land-grant system. By this means it was hoped that, while much needed transit facilities would be obtained without adding to an already comparatively large indebtedness, immigration and settlement would be promoted, and outside capital embarked in developing the resources of the country. As already pointed out, the country had been largely colonised on the eighteen pence an acre value paid by purchasers of land in the form of personal property introduced. The Governor himself received 100,000 acres in lieu of salary, although, when his services were assessed at £800 per annum, he was ultimately paid from the date of his appointment. But this system of settlement left the colony practically and permanently undeveloped, by causing the dispersion over a wide area of a very small population. No wonder, then, that a solution of this matter should have been looked for in the promotion of land-grant systems of railway construction. Various negotiations were entered into and dropped; but a contract was at last signed by Sir Frederick Napier Broome and Mr. Anthony Hordern, of Sydney, for the building of a line to connect Beverley and Albany. Under the terms of this agreement payment was to be made at the rate of 12,000 acres for every mile of completed road, and this concession was handed over to a syndicate of London capitalists who undertook the construction of the line. The lands selected in payment were situated within a belt of 40 miles, on each side of the line, but half the frontage to the railway was reserved by the Government. The line, which has a total length of 243 miles, was opened for traffic on the 1st July, 1889, and in January, 1897, it became the property of the Government, the purchase money amounting to £1,100,000.

Following upon the West Australian Land Company's agreement to construct the Great Southern Railway Line between Beverley and Albany, came another land-grant contract to connect the city of Perth with Geraldton, *viâ* Gingin, the Victoria Plains, and the Irwin and Greenough Flats. However, the work on this route was temporarily suspended, the original syndicate having become involved in financial embarrassments which necessitated a transfer of the operation of construction to other parties. Other lines were planned to tap the timber forests of the Darling Ranges from various points on the southern coast, one connecting Rockingham with the Jarrahdale Company's Depôt, a second having its base at Bunbury, and a third running to the small shipping port of Lockville, near the Vasse.

During Sir William Robinson's second administration, strong remonstrances concerning the retention by the Governor and his Executive of the power of disbursing the public funds without reference to the people who were taxed to provide them, were addressed to the Secretary of State for the Colonies, who promptly directed the introduction of a Bill for securing to the Legislature further control of the finances. An Act was framed accordingly, under the provisions of which no unauthorised expenditure could take place (except in cases of emergency) without the approval of a Committee of Finance, acting for the House while its members were not in session. The result of this measure was immediately apparent. The people's representatives obtained an influence in the conduct of public business which they had never previously possessed, the Government becoming altogether dependent upon them for supplies, and therefore compelled the more closely to study their wishes, and to give them the constitutional position to which they were rightly entitled. But this measure of reform, sought for in the interests of the old Constitution, and with a view to prolonging its existence, was in itself a main factor in leading to the conclusion that Responsible Government must be obtained.

About the year 1885, during the administration of Governor Broome, the desire for Responsible Government may be said to have become a political aspiration among the residents of the towns and the more settled districts. For an entire decade preceding (from 1875 to 1885) an influential majority of the members of the Legislature had remained opposed to any change, though the country—apart from the Administration—continued to be divided in opinion. Those who opposed reform in the Constitution seemed justified of their convictions, as of late years the old form of Government appeared well-suited to the colony's requirements. Certainly, the appointments made to the Executive had not, in every instance, given the completest satisfaction; but the authorities of the Colonial Office had, in all other matters, almost entirely ceased to intervene in West Australian affairs. The Governor ruled the country with all but absolute power, it is true, nevertheless, he maintained most cordial relations with his Legislature. Indeed, without more than formal reference to the Home Authorities, decisions of the first importance were locally arrived at, works of a serious nature were embarked upon, and various means taken for the development of the colony's resources by the aid of borrowed money. Legislation, too, was free from the control of the Colonial Office, and, so far as its general policy was concerned, Western Australia was to a great extent a self-governed colony. The upper and privileged classes, together with the Civil Service, were, as a rule, opposed to the granting of Responsible Government, but the population in the urban centres enthusiastically supported it. As might naturally have been expected, the reform party steadily gained in numbers and influence. Railway expansion and gold discoveries were knitting the people together, and attracting fresh elements to the country.

In the year 1886 an Act (50 Vic., No. 10) was passed, increasing the number of members of the Legislative Council to twenty-six, nine to be nominated, the northern portion of the Northern District being taken to form the new "Kimberley District." In this year also certain by-elections took place, and as a result the party of reform secured a small majority in the House—a majority which it was evident would go on steadily increasing, and would, in the event of a general election, become very strong, perhaps even overwhelmingly so. The Conservative party, therefore, had to consider what position they should take up; whether the absolute opposition to constitutional change should be persisted in now that the reformers had practically won the battle, or whether an approachment should be made to them. It was eventually decided no longer to oppose the popular wish, but to join with the moderates in endeavouring to obtain the best form of Constitution that experience could suggest. As a result of this decision, Mr. S. H. Parker, in the winter session of 1886, moved a series of resolutions in favour of Responsible Government, and these passed the House by a large majority, only one elected member voting against them.

While the agitation was in progress for free political institutions, the attention of Western Australians, and of the miners of the eastern colonies, was directed to the gold-fields of the north. Hardman's reports had begun to attract attention, though he cannot be said to have been the original discoverer of the precious metal in the two Kimberleys. Shortly before he began his geological researches, some wandering prospectors had found indications of the presence of gold in the country at the head-waters of the Margaret and Ord Rivers. Nevertheless, Hardman's report was of great value, and he never led astray those who were careful to follow his directions. Soon after his return from his second expedition, prospecting was engaged in with some vigour; towards the end of 1885, specimens were brought into Derby from the vicinity of Mount Barrett by several fortunate gold-hunters; and this incident led to the disastrous "rush" that took place in the following year. Mount Barrett was too far distant from a base of supplies to prove anything but the scene of hardship, misery, and failure. It was 300 miles distant from the Port of Derby, and 250 miles distant from Wyndham, newly opened in the Cambridge Gulf. No tracks existed, and a rainy season was certain to cut the diggers off from the coast. But men poured into Wyndham in their hundreds, on the road to Mount Barrett, and the Government cautioned the reckless adventurers in vain. Some of the new arrivals were old hands on gold-fields, and came to the "rush" fully equipped and adequately provisioned, but the greater number were without experience—clerks, storemen, citizens, and city dwellers generally, unaccustomed to hardship, and altogether unsuspecting the difficulties the dangers and the privations they must encounter in such a latitude as that of Mount Barrett. Disappointment met them as soon as they arrived; the alluvial workings had not turned out as expected,

and the gullies, where the first rich finds had been made, were soon exhausted. Luck, however, did not wholly desert a certain proportion of experienced diggers, although the majority of the gold-hunters made barely sufficient to pay current expenses; indeed, many were at the point of starvation. Then the note was sounded to retreat, and the rush back to Wyndham degenerated into a stampede. Nothing but the prudent precautions of the Government averted all sorts of excesses, lawlessness, and riot. By-and-bye the unsuitable portion of the population of the gold-fields was drafted off, and the few hundreds of gold-diggers who remained entered upon a systematic examination of the quartz-reefs described by Mr. Hardman as so full of promise. The purging of the field of the incompetent and the inexperienced was not, however, accomplished without cost. The army of the defeated beat a retreat under all the rigours of a cruel climate; great distress was suffered from drought and heat; terrible hardship and pain from lack of provisions; while, on the line of march, many deaths occurred from disease, starvation, sunstroke, and exposure. Those who remained were furnished with only the most rudimentary appliances for the extraction of the precious metal; but the success of the first primitive attempts exceeded the expectations of the most sanguine; while subsequent assays of parcels sent to Melbourne seemed to establish the fact that in the two Kimberleys were some of the richest reefing-fields the world had ever seen. The Government, at all events, showed its faith in the roseate visions of the future of these Northern gold-fields by hastening the construction of a telegraph line from Derby to the auriferous areas, and by adding to the conveniences for shipping at the settlements in King Sound and Cambridge Gulf. The line of telegraphic communication was subsequently continued to Wyndham. Indications of gold began to be found all over the colony; at the head-waters of the De Grey River; in the Darling Ranges, close to the Swan and Canning Rivers; at the Yulgan Hills, east of Newcastle; at Paterwangy, near Champion Bay; at the Kendenup Station, near Albany; and at various other localities; but for some time Mount Barrett, Hall's Creek, and the fields reached from Derby and Wyndham in the two Kimberleys, were supposed to be the only payable finds in the Colony.

In the month of July, 1887, it was resolved, by an almost unanimous vote of the Legislature, in affirmation of the principle of self-government, that His Excellency be requested to take the necessary steps eventually to secure it. Among the notable events of this year was a terrible hurricane that swept over a great portion of the colony, causing great damage to property; and (in the month of December) the discovery of gold at Yilgarn. The find was an accidental one, at a place called Mugakine; and was confirmed by a subsequent discovery at Golden Valley, in the same district. Southern Cross, one of the centres of the Yilgarn gold-field, was so named by the party who first prospected it, because they had been guided to the spot by night, while following the constellation so designated.

Affairs political were in the meantime trending towards the realization of the efforts made towards Responsible Government. In December, 1888, the Legislative Council was dissolved, and a general election took place in the month of January following, in order that the constituencies might have an opportunity of expressing their views upon the question of the new Constitution. When the Council re-assembled, the resolution favouring Responsible Government for the colony was again carried, this time without a single dissentient voice. The Legislature met in April, and a Constitution Bill, drafted by the Government, was at once brought forward, and, after amendment, was passed and forwarded to the Secretary of State for the Colonies, the Governor (Sir Frederick Napier Broome), Sir Thomas Cockburn-Campbell, and Mr. S. H. Parker being appointed by the Legislature to proceed to England to act as delegates on behalf of the colony when the Act came before the Imperial Parliament. These gentlemen experienced much difficulty in carrying the measure through its various stages, strong opposition having arisen in the centre of the Empire against the granting of Western Australia's desire for self-government. This opposition was mainly, if not altogether, the outcome of a misunderstanding relative to the control of the Crown lands of the colony. It was held by a considerable party in the mother country that such lands were the "heritage of the British people," and should be inalienably held by the central authorities for settlement by the surplus population of Great Britain and Ireland. So demonstrative was the opposition that it appeared for a time as if Responsible Government for West Australia was fated to be seriously jeopardised, and indefinitely postponed.

At the beginning of the year 1888, Perth was connected by telegraph with the far northern settlement of Derby, on King Sound; and in May of the year following, the cable connecting Banjoewangie, in Java, with Broome, in Western Australia (a little to the north of Gantheaume Bay), was laid. Another important gold discovery also distinguished the year 1889. This was the finding of the Pilbarra field, on the De Grey and Oakover Rivers, in the Northern District. The new field was proclaimed in the month of July, 1889, and by the end of the year it had exported 11,170 oz. of gold, valued at £42,446. During the year Yilgarn had produced 1,859 oz., valued at £7,062, making with 2,464 oz. sent from Kimberley, a total export of 15,493 oz., valued at £58,493. From this date the auriferous character of Western Australia was established, the gold increased from year to year, new gold-fields were successively discovered and proclaimed, and a great accretion to the population of the colony was gained from the eastern parts of the Australian Continent. Among the most famous of the continuous finds were the gold-fields known by the names of Ashburton, the Gascoyne, the Murchison, the Dundas, the East Murchison, the East Coolgardie, Coolgardie, the Yalgoo, the West Pilbarra, the Mount Margaret, the North-east Coolgardie, the Broad Arrow, the Peak Hill, the Kanowna, and the Kalgoorlie. One of the most sensational finds

was made in the Coolgardie field by Messrs. Bayley and Ford in 1892; it was christened "Bayley's Reward." One day Bayley, whose party was at the last extremity, appeared in the township of Southern Cross, loaded with several hundred ounces of gold and many rich specimens encrusted with the precious metal, but sadly in want of provisions. This incident led to a wholesale exodus to what is now known as Coolgardie, one of the richest fields in the colony.

Sir Frederick Napier Broome's Administration terminated on the 21st December, 1889, after a rule of six years and nearly seven months. During the Governor's absence on leave to England, from the 11th November, 1884, to the 16th June, 1885, the colony was administered by Chief Justice A. C. Onslow; and during a second absence, from the 1st January to the 21st February, 1888, by the Hon. Sir Malcolm Fraser, who again administered from the 21st December, 1889, to the 20th October, 1890, after Sir Frederick Napier Broome's departure from the colony, pending the appointment, for a third term of Governorship, of Sir William Cleaver Francis Robinson.

In the meanwhile, the battle on behalf of Responsible Government was being waged at Westminster. The Bill providing for a new Constitution was eventually referred to a Select Committee, with the Baron De Worms as Chairman, for the purpose of taking evidence. So impressed was this body, after hearing what the representatives of the colony had to urge, and after a calm consideration of the advantages likely to result from giving the Western Australians a free hand in their great national estate—so thoroughly was the Committee convinced of the errors underlying the British popular opposition to the measure, that the Bill was returned to the Imperial Parliament unencumbered by nearly the whole of the clauses to which the Legislature of the Colony had previously objected, and a recommendation was made that the full and complete control of the Crown lands should be vested in the local Parliament which it was proposed to create. Thus was Western Australia—"one and undivided"—obtained for its colonisers; a result due to the intelligence and broad-mindedness of a majority of the members of the Select Committee, combined with the untiring exertions of the colonial delegates, assisted by the knowledge and influence of Sir William Robinson, who, as it opportunely happened, was in England during the battle for Responsible Government. Considerable help was also given to the West Australian delegates by the Agents-General for the other Australasian Colonies at a time when, in consequence of delays due to the Imperial Cabinet, the Bill appeared to be in jeopardy. At this juncture the Agents-General, in a body, waited upon the leader of the Government in the House of Commons, and made representations which swept away all final obstacles, and the Bill, enabling Her Majesty "to grant a Constitution to Western Australia," passed its third reading in the Lower British Chamber on the 4th July, 1890, and meeting with no opposition from the Lords, received the Royal Assent on the 15th August following. The present

Constitution of Western Australia differs but little from those of the other Australasian Colonies. The Executive power is vested in the Governor, who is appointed by the Crown, and who acts under the advice of a Cabinet composed of five Responsible Ministers. The Executive Council consists of the Governor (who acts as President), the Colonial Secretary, the Attorney-General, the Colonial Treasurer, the Commissioner of Crown Lands, and the Commissioner of Railways and Director of Public Works. Responsible Government was proclaimed in the colony on the 21st October, 1890, on which date the old Legislature was abolished. The new Parliament met on the 30th December following, with Sir John Forrest as Premier. The Forrest Ministry is still in office, but of its original members Sir John Forrest alone remains. Sir William Robinson continued as Governor until the 16th August, 1895, and was succeeded by Lieutenant-Colonel Sir Gerard Smith, who arrived in the colony on the 23rd December. On the 22nd March, 1900, Sir Gerard Smith left for England after a period of office lasting about four years and three months, and on the following day the Chief Justice, Sir A. C. Onslow, took up the duties of Administrator of the Government.

For long the question of the loss of revenue, which would undoubtedly occur to the colony, appeared to impose an insurmountable barrier to the entry of West Australia as an original State in the Commonwealth of Australia, even with the special concessions made to the State in the Bill approved by the Convention. The dread of isolation, from which Western Australia had so long suffered, proved more powerful than the fear of pecuniary embarrassment, and the Parliament of the colony, at the invitation of Sir John Forrest, determined to submit the question of federation to the decision of the electors. The strength of the federal sentiment was made abundantly manifest in the result of the referendum—the vote in favour of union with the rest of Australia being carried by a majority of more than two to one.

TASMANIA.

TASMANIA was discovered by Abel Janszen Tasman on November 24th, 1642, and by him was named Van Diemen's Land, after the Governor of the Dutch Possessions in the East Indies, who had fitted out the expedition which Tasman commanded. The ceremony of hoisting a flag and taking possession of the country in the name of the Government of the Netherlands was actually performed, but the description of the wildness of the country, and of the fabulous giants by which Tasman's sailors believed it to be inhabited, deterred the Dutch from occupying the island, and by the international principle of "non-user" it passed from their hands. Some hundred and thirty years after Tasman's voyage the island was again visited—this time by a French expedition under Captain Du Fresne. In 1773, Captain Furneaux, of the "Adventure," one of the great Cook's squadron, anchored in Storm Bay; and later, in 1777, Captain Cook himself visited the same locality. The famous Captain Bligh also touched at the island in 1788—the same year that witnessed the foundation of the settlement at Port Jackson. Again, in 1792, a French expedition under D'Entrecasteaux entered Storm Bay, and surveyed portions of the coast. During the whole of this period it was believed that Van Diemen's Land was only a southward projection of the great Australian Continent, and, indeed, it figured on the maps as such. Its insularity was proved by Lieutenant Flinders, who completed its circumnavigation in the sloop "Norfolk" in 1798. He was accompanied on the expedition by Surgeon Bass, who had previously discovered the strait bearing his name. In 1802 the French expedition under Commodore Baudin visited the island, and it was partly the fear of French occupation that led to the foundation of a British settlement in the new land.

In the month of September, 1803, Lieutenant Bowen was despatched by Governor King in the "Lady Nelson" to establish a settlement at Risdon Cove, or Restdown, as it was sometimes called, which is situated on the banks of the Derwent River, some 4 miles above the site of Hobart, but on the opposite side of the stream. Bowen had been despatched previously—on the 13th June, 1802—in H.M.S. "Glatton" to the island, in order to take possession of the place, and establish His Britannic Majesty's rights thereto. The penal establishment which the Imperial Government had established on the shores of Port Jackson was full to overflowing. About a thousand had been drafted away to Norfolk Island, but the parent settlement was still somewhat crowded. The Governor-General of New South Wales, therefore, cast his eyes towards

Van Diemen's Land as an outlet for the relief of the parent establishment. Besides, the French had to be forestalled; for though the island was included in Phillip's commission, and that of his successors, nevertheless, the very proof of its insularity created it a country separate from New South Wales, liable to lapse from British sovereignty unless actually occupied under authority of the British Crown. Bowen's colonising party was a small one, but it formed the advance guard of a great convict immigration. When the muster was taken on the 27th September, 1803, the total population was only forty-nine. Of these, ten were women and three were children. The convicts numbered twenty-four and the soldiers twelve, but a small party of free settlers, with their wives and children, subsequently arrived. Shortly after the first landing, the settlement was removed from Risdon to Sullivan Cove, and spread slowly along the banks of the Derwent River, the latter name being used in the enumeration of the people on the muster sheets. In the month of February, 1804, the little colony received a considerable accession by the transference of Collins' expedition from Port Phillip to the Derwent River.

Collins' commission was of a roving character. He was instructed to proceed to Port Phillip, or to any part of the southern coast of New South Wales, or to the islands adjacent, and there establish his little colony. Collins sailed from England on the 24th April, 1803, in the "Calcutta," having on board 299 male convicts, 16 married women, a few settlers, and 50 men and petty officers of the Royal Marines. This vessel was accompanied by the "Ocean" as a store-ship. Collins had landed at Port Phillip, but his reports of the country were so unfavourable that Lord Hobart, the Secretary of State for the Colonies, at once sent him instructions to break up the settlement and transfer the people under his charge to the Derwent River in Van Diemen's Land. Collins obeyed the orders of his chief with cheerful alacrity, and on the 27th January, 1804, left the disparaged harbour for the new field of his labours. The "Ocean," with the first instalment of the party, which numbered in all 402, anchored in the Derwent on the 30th of the same month; the second detachment arriving by the "Lady Nelson" on the 16th February. Collins landed at the place whereon the city of Hobart now stands, and there and then selected it as the site of his future capital.

Governor-General King, consumed with anxiety to forestall the French in their designs upon Australasian territory, had given instructions to the officer commanding the "Lady Nelson" to sail round to Port Dalrymple, in the north of the island, after discharging his mission with Collins, and to report upon the Tamar River, and the surrounding country, as to their eligibility for the purposes of a military station. The officer did as he was directed, and reported the country as well adapted for settlement. In consequence of this favourable account, an expedition was made at the close of the year 1804 to Port Dalrymple, the first landing being effected at Outer Cove, now called Georgetown;

but the station was shortly afterwards removed to the opposite side of the river, to the indentation known as the Western Arm, where it received the name of York Town. The latter site also did not prove suitable, and this settlement was soon abandoned for the North Esk, where, after some time, it changed its general designation of Port Dalrymple for the specific one of Launceston, a name derived from Governor King's birthplace in Cornwall. The new settlement was placed under the control of Lieutenant-Governor Paterson, and he landed in Van Diemen's Land in the month of October, 1804, with a small party of prisoners and soldiers. At the time when this expedition was despatched to Port Dalrymple, Governor King issued a "general order," in which he proclaimed the division of the island into two independent Governments, designated respectively the counties of Buckingham and Cornwall, the dividing line being the 42nd parallel of south latitude. Each of these Governments was subordinate to King in his capacity of Governor-in Chief and Captain-General of New South Wales and its dependencies. The two counties still figure on the map of Tasmania, but greatly shorn of their original magnitude, as they have been subdivided into eighteen others. Between Launceston and Hobart there was for some time no communication, and even as late as 1816 the mail took seven days to cross from settlement to settlement.

In the year 1805 Van Diemen's Land received an accession of population from Norfolk Island, the New South Wales Government having determined to evacuate the latter place, and transfer the bulk of the people to the new colony on the Derwent River. New Norfolk, somewhat further up the stream than the old Risdon settlement, still recalls in its name this immigration of the Norfolk Island settlers to Van Diemen's Land. The new-comers received liberal grants of land, but contributed very little to the industrial development of the country, which, for many years, remained dependent on the mother colony of New South Wales for its food supplies. When the failure of the crops occurred at the parent settlement, between the years 1807 and 1810, matters were brought to a painful crisis. The provisions which had been stored in a Government depôt, under the immediate control of the Lieutenant-Governor, were all but consumed, so the convicts were given temporary liberty to enable them to procure food in the shape of the wild denizens of the bush, and it was only by the timely arrival of a cargo of wheat from India that the little colony was saved from a condition of total collapse.

The enfranchisement of the convicts was, however, attended by woful results. Very early in the experience of the settlement serious difficulties had arisen with the aborigines, as it was the custom to term them, though scientists consider that the natives of Van Diemen's Land were not an aboriginal race. On one occasion a party of blacks, about 500 strong, including women and children, were engaged in hunting near the Risdon depôt, when they were set upon by some of the white settlers, who slaughtered a great number of them, one estimate enumerating the

killed at fifty. This horrible outrage of course inspired the natives with sentiments of hatred and revenge, and impelled them to acts of reprisal. These were further stimulated by the abominable treatment meted out to the blacks by the liberated convicts of the famine period during their kangaroo hunts. Collins did his utmost to put down "the murders and abominable cruelties practised upon the natives by the white settlers"; but the means at his command were inadequate for the purpose. Van Diemen's Land, unlike the colonies established on the Australian Continent, managed from the very first years of British occupation to create a native difficulty, which was ultimately to produce much trouble and annoyance, and to occasion a huge expenditure of Imperial funds in its effectual solution.

Lieutenant-Governor Collins died in Hobart Town on the 24th March, 1810, just after Governor Macquarie had taken up his official duties in the mother colony. The sub-government of the Island was administered, until the arrival of Lieutenant-Governor Davey, by Lieutenant Lord and Captain Murray, and afterwards by Lieutenant-Colonel Gilles.

A certain measure of prosperity had by this time been attained by the development of the first rude efforts at agriculture, and by the energetic establishment of the whale fisheries, Tasmania speedily becoming the centre of the latter industry in Australasian seas. Settlement was, however, greatly retarded by the lawless establishment of an organised system of plunder and rapine carried on by gangs of armed men, or bushrangers, as they had begun to be termed; indeed, what of wild romance and gruesome picturesqueness there may be clinging to the early days of "Old Vandemonia" is due to the ruthless extinction of the native race, and the dark deeds of the escaped convicts and expired-sentence men, who carried on a war of brigandage against the property and the persons of the terrorised farmers and stock-owners. They slaughtered sheep and cattle; they burnt down hay and corn stacks; they looted granaries and robbed houses, and then they took to the well-nigh impenetrable jungle of the bush and the fastnesses of the mountains, carrying nameless atrocities into the haunts of the unarmed aborigines. The important part played by these desperadoes in the early history of the Island is still preserved in the ominous names given to some of the geographical features of the interior: Brady's Sugar-loaf and Brady's Lookout are appellations reminiscent of a notorious bandit.

The rule of Governor Davey was notoriously feeble, and the moral condition of the colony in his time was anything but healthy; nevertheless, he did his best for the natives, condemning the atrocities perpetrated upon them, but with little effect. The free people at this time consisted of inland settlers, liberated convicts, escaped prisoners, bushrangers, sealers and whalers, and runaway seamen. For most of these the law had no terrors, and they gave unbridled license to the

exercise of their evil dispositions. It is no wonder, then, that the treatment which these degraded wretches meted out to the aborigines should have been followed by terrible reprisals.

Davey surrendered the administration of the Island on the 9th April, 1817, and was succeeded by Colonel Sorell, a man of an entirely different character. The new Lieutenant-Governor has been praised for his energy, his firmness, and his sagacity, and was probably as well fitted for his position as any man upon whom the choice of the Secretary of State for the Colonies could have fallen at the time. His first task was the suppression of bushranging—a work that he put through with a vigorous hand—and he succeeded in well-nigh stamping it out. He also gave grants of land, and lent Government seed and stock, to suitable settlers, and thus encouraged immigration to the little Colony. During Sorell's term of office 300 lambs, from Captain John Macarthur's Camden flock of merinos, were imported into the Island from New South Wales. A few years subsequently the exportation of wool from Van Diemen's Land began, and from that time the proportions of this industry steadily grew.

In 1821, just prior to his return to England, Governor Macquarie visited Van Diemen's Land, and found there a population of about 7,400. The inhabitants of Hobart Town and its immediate neighbourhood were returned as numbering 2,700. There were 15,000 acres of land under cultivation, and the live stock comprised 5,000 head of cattle and 170,000 sheep. The interests of religion and education were being provided for, a newspaper was published, and there existed between Hobart Town and Launceston a fortnightly mail, which occupied a week in transit. A local Court, with a limited jurisdiction, had been established since 1816, in which ordinary citizens shared with professional lawyers the right to plead.

Launceston also had experienced a measure of development, though, of course, much less rapid than its southern rival, Hobart Town. From the early muster-sheets some idea of the progress made at the northern settlement may be gathered. Lieutenant-Governor Paterson assumed control of the station at Port Dalrymple, and exercised authority over the county of Cornwall (half of the Island north of the 42nd parallel of south latitude) in the month of October, 1804. He took with him sixty-four non-commissioned officers and privates of the New South Wales Corps, seventy-four convicts, and eight other persons, civil and military officers—146 in all. In the month of August, 1805, the number of persons resident at Port Dalrymple had grown to 301, of whom 155 were convicts. The population fell off slightly during the next ten years, maintaining an average of about 250 only; but in 1815 Launceston, as it was beginning to be called, was recorded as possessing 495 inhabitants; in 1817 these had increased to 610, and in 1819 to 2,115.

Colonel Sorell distinguished his term of office by engaging in various futile efforts for the amelioration of the aborigines; but the resources

at his command were far from sufficient to enable him to cope effectively with the difficulty, so that by the time he left office little, if any, progress had been made in this direction.

Lieutenant-Colonel Arthur was appointed to the administration of the colony in succession to Sorell in 1824, and entered upon his duties on the 15th May. From the outset his rule appears to have been extremely unpopular, though, under the conditions of settlement then existing in Van Diemen's Land, it would hardly have been possible for a Governor to have done his duty and achieved popularity. About eighteen months after his arrival in Van Diemen's Land, the colony was proclaimed an independent province, and the Imperial Parliament presented the inhabitants with a Constitution of the colonial type of the period, which provided for an Executive and a Legislative Council, with certain circumscribed functions, mainly advisory. The new system was felt by the Governor as a clog upon his government, and he made no pretensions that it was acceptable to him, nor did he in any way modify his methods of ruling. Governor Arthur had no idea of conciliation. He dismissed a popular Attorney-General who opposed him, and adopted extreme measures towards the Press, the liberty of which he strained every nerve to destroy. These actions intensified his already sufficient unpopularity. To the best of his marked ability, however, he strove to promote the interests of religion and education in the colony, and while he directed the Government many churches were built, and many schools were established; the public finances were adjusted to expenditure in a satisfactory manner; and, after providing for the disbursement of some £50,000 per annum, he was able to carry forward a surplus. Governor Arthur also turned his attention to the Department of Justice, and for the better administration of the law he divided the Island into police districts, with a Stipendiary Magistrate for each district; yet his severity in the enforcement of the laws undoubtedly was the means of manufacturing criminals of the deepest dye. Many convicts who had been transported from England on trivial charges had their better natures crushed and were completely brutalised by the harsh treatment meted out to them for the smallest misdemeanours. A year after Governor Arthur's appointment to the administration of the Island, no fewer than a hundred armed convicts were at large throughout the country districts. The reign of terror, which had been such a distinguishingly infamous characteristic of the days of Governor Davey, was revived and re-established. When night fell, every house that stood by itself in the bush or in the cultivated areas was strongly barred and bolted and barricaded, and the safety of the sleeping family was entrusted to one or two of the household, who watched throughout the hours of darkness with firelocks in readiness, their muzzles gleaming through the port-holes with which necessity had pierced the walls of the homestead. One desperado named Brady, whose Sugarloaf and Look-out have already been mentioned, and whose lawless deeds are still a tradition, at the head of a gang of armed

convicts, was at large throughout the country, ravaging and pillaging in all directions. On one occasion this bushranging captain, with a mounted band of outlaws, swept down on the North Coast and captured the town of Sorell; seizing the gaol, they locked the soldiers guarding the place in one of the cells, and liberated the whole of the prisoners. Matters now began to grow desperate. Authority in the Island was divided between Colonel Arthur and Captain Brady and other bush-ranging magnates. The struggle was one of law against lawlessness, and constituted power did not always get the better of the conflict. Governor Arthur determined to make a strenuous effort to assert the supremacy of the law. He placed himself at the head of a strong force of military and settlers and hunted down the gangs of outlaws. No fewer than 103 persons suffered capital punishment during the years 1825 and 1826, and organised highway robbery once more ceased to be a reproach to the colony.

The distinguishing feature of Arthur's governorship was, however, the military campaign which he conducted against the aborigines. Governors Collins, Davey, and Sorell had done their utmost to protect the natives against the outrages and illtreatment of the free whites; but all their efforts to put an end to the frightful state of things that prevailed in this relation had proved in vain. On November 1st, 1828, Governor Arthur proclaimed martial law, and offered a reward of £5 for every adult and £2 for every child captured and brought to head-quarters without suffering any injury. Search parties were at once got together and set forth on the quest. Many captures of aborigines were made by these parties; but, unfortunately, not without fatal conflicts. At this juncture came the gigantic fiasco of the whole enterprise. The scheme was Governor Arthur's own, and cost the Imperial Government the sum of £30,000. This master stroke of tactics was an attempt to imprison the natives in an ever-narrowing circle. To this end Governor Arthur ordered a military cordon to be drawn across the Island of Tasmania from east to west. Quite a large force was pressed into the work. There were 800 soldiers, the police of the colony, upwards of 700 convict servants, and a number of civilians. It was confidently expected that this force was sufficient to drive the aborigines into Tasman's Peninsula simply by advancing against them. There must have been somewhere a hitch in the proceedings, for after the expenditure of the large sum mentioned, the campaign resulted in the capture of a man and a boy, the remainder of the natives having silently slipped through the lines.

During Arthur's term of office the Van Diemen's Land Company obtained its charter of incorporation from the Imperial Parliament, and received grants of land in various parts of the colony amounting to upwards of 400,000 acres, of which 150,000 were situated at Woolnorth, the extreme north-west corner of the Island; 10,000 at Robbin's and Trefoil Islands; 10,000 at Middlesex Plains; 20,000 at Circular Head (now well known for its potato crops); 10,000 at

Hampshire Hills; 150,000 at Surrey Hills; and 20,000 at Emu Bay, besides areas in other different districts. For these concessions the Company was to pay an annual quit-rent of £468 16s., with the option of redemption at twenty years' purchase. During Arthur's rule, banks were established in Hobart Town and Launceston. In 1828 the first land-sales in the Island took place, but so low were the prices obtained, that 70,000 acres enriched the Treasury by only £20,000. In the month of January, 1831, the system of issuing free grants of land was abolished. In the year 1835 the district of Port Phillip (now the Colony of Victoria) was settled from Van Diemen's Land—practically from Launceston—a movement that reacted most beneficially upon the prosperity of the northern part of the Island. At the same time the development of the internal commerce and industry of the little colony was greatly advanced by the construction, through the medium of convict labour, of roads, bridges, wharves, and other public works. Instead of a fortnightly, there was, in 1835, a bi-weekly mail running between Hobart Town and Launceston, the period of transit having been reduced from seven days to nineteen hours. The penal settlement at Macquarie Harbour had also been given up, and the convicts removed to Tasman's Peninsula. There had also been considerable amelioration in the lot of the victims of the Transportation System, through the introduction of more humane methods.

The Government of Van Diemen's Land was administered by Colonel Arthur for over thirteen years; he assumed office on the 14th May, 1823, and retired on the 31st October, 1836. From the date of his accession to power in the Island until the 3rd December, 1825, he was merely the subordinate officer of the Governor of New South Wales. On the date last mentioned, the Governor-in-Chief, Lieutenant-General Ralph Darling, visited Van Diemen's Land and formally proclaimed its independence. On the 6th of the month Arthur resumed the administration of the colony. An Executive and a Legislative Council were called into existence, the latter being on the same model as that introduced into the other colonies at the earliest stages of their progress. One of the Members of the first Legislature in Van Diemen's Land (1825) was Edward Curr, who formed the settlement at Circular Head for the Agricultural Company to which the Government of George IV had granted the great territorial concessions already alluded to.

From the date of Colonel Arthur's relinquishment of authority, October 30th, 1836, till January 5th, 1837, the colony was administered by Lieutenant-Colonel Snodgrass as Acting Lieutenant-Governor. On the date last mentioned there arrived in the colony the new Lieutenant-Governor, Captain Sir John Franklin, R.N., K.H. Sir John Franklin remained in office till the 21st August, 1843, a period of six years and seven months.

Franklin had, happily, one less of the troubles that afflicted his predecessors. He was worried by no native difficulty. After Governor Arthur's failure to drive the aborigines into Tasman's Peninsula, a

humble bricklayer in Hobart Town, named George Augustus Robinson, by unaided effort, achieved all that force and authority had been powerless to perform. Animated by a splendid enthusiasm for the ill-used natives, he made a spontaneous offer to the Government to undertake the task of supervising the efforts made for their welfare, if the authorities would guarantee him a bare support. In response to this generous proposition he was specially appointed Protector of the black natives of Van Diemen's Land at a salary of £100 per annum. He thereupon set out on a series of journeys throughout the Island. Unarmed and unattended, he travelled among his aboriginal charges throughout the length and breadth of the colony, exhibiting a courage almost sublime in circumstances of extreme danger, and winning the love, the confidence, and the esteem of the most belligerent of the people whom he was authorised by the Government to safeguard. After travelling on foot some 4,000 miles over the wildest and roughest parts of Van Diemen's Land, and without shedding a single drop of native or European blood, he brought the timid natives, who had once held the colony in a state of permanent alarm, into a haven of peace and safety. Ultimately he managed to place on Flinders Island upwards of 200 aborigines. The native settlement at Flinders Island was formed in 1835. In 1847, only twelve years afterwards, the number had dwindled down to 44 persons. These survivors were eventually deported to Oyster Cove, on the main Island; but on the 3rd March, 1869, Guillaume Lanné, the last male of his race, died at Hobart Town, aged 34 years.

One of Franklin's first official acts was the giving of publicity to the proceedings of the Legislative Council. He also endeavoured to bring about agreeable relations between the various parties in the community by his personal influence, his tact, his geniality, and his hearty and conciliatory manners. In all his efforts to ameliorate the social conditions of the colony he was ably seconded by his zealous and talented wife. Sir John Franklin's term of office expired on the 21st August, 1843, and he returned to England. He was immediately succeeded by Sir John Eardley-Wilmot, whose administration forms one of the most unfortunate phases in the annals of the colony. In 1845 there were some two thousand convicts in the settlement at Norfolk Island, controlled by Superintendent John Price. This man's administration of affairs was particularly cruel and merciless, and instead of checking the degraded instincts of his charges, served to aggravate them to fresh deeds of fiendish depravity. The settlement was a pandemonium, and matters went from bad to worse, till at last rumours reached the ears of the Home Authorities. Governor Eardley-Wilmot thereupon received instructions to break up the penitentiary at Norfolk Island, and transfer the establishment to Port Arthur. Although this was carried into effect, the Governor still permitted Commandant Price to retain his office of superintendent. It was not long before Port Arthur earned for itself a name as sinister as that ever

possessed by Norfolk Island, or Macquarie Harbour. The horrors of the "system," as practised there, were so awful that many of the convicts gladly welcomed execution as a relief from them. At an inquiry before a Select Committee it was elicited that in some instances prisoners murdered their comrades with no other motive than to earn a respite by death from their hideous surroundings.

For some little time a feeling had been growing in the colony in favour of the abolition of the "system" and the transfer of the Norfolk Island "irreclaimables" to Van Diemen's Land served still further to accentuate it. There were, of course, as in other countries used as penal settlements, great financial difficulties in the way of reform. The expenditure by the Imperial Government on the maintenance of the penitential establishments was something like £300,000 per annum; but the Secretary of State for the Colonies was resolved upon cutting down this sum, and making the penal stations self-supporting as far as it could possibly be managed. In pursuance of this new policy a stoppage was made in the building of roads, wharfs, and other public works such as had hitherto been carried on at Imperial expense; and the convict labour thus liberated was applied to the clearing of land and the cultivation of crops. The produce thus raised was consumed by the prisoners themselves, and if a surplus remained over it was sold in the open market, to the financial injury of the farmers, who were not only deprived of their ordinary avenues of trade, but were subjected also to an inevitable and ruinous competition. This course of action on the part of the Imperial Authorities gave a severe blow to the agricultural industry, which necessarily reacted on the tradespeople of the colony. As another consequence, the revenue from the sale of Crown lands fell off almost to nothing, and the colony drifted deeper and deeper into debt, and fresh sources of revenue from taxation had consequently to be found.

At that time the Legislative Council was in part composed of nominee Members, and six of them—known to history as the "Patriotic Six"—resigned their seats rather than acquiesce in the imposition of fresh burdens upon the people under an irresponsible system of government, and as an emphatic protest against the unconstitutional conduct of the Governor himself in borrowing money from the banks, and spending it without the authorisation of the Legislature. This action on the part of the so-called "Patriotic Six" took place in the month of October, 1845, and in the following year Sir John Eardley-Wilmot received a message from the Hon. W. E. Gladstone, recalling him from the Government of Van Diemen's Land. This course was explained to the unfortunate gentleman to have been taken, "not on account of any errors committed by the Governor in his official capacity, but because rumours reflecting upon his moral character had reached the Colonial Office." Mr. Gladstone, moreover, augmented the harshness of this utterance by refusing to give Sir John the names of his traducers, and thus to enable him to clear himself of the charges laid

to his account. It is, however, significant, that persons holding high positions in the Island, such as the Bishop, the Chief Justice, and others in daily intercourse with His Excellency, maintained with warmth and loyalty that the Governor had been blackly maligned without the shadow of a foundation for the aspersions cast upon his character. Sir John Eardley-Wilmot died of a broken heart only eight days after the landing of his successor. At his funeral a notable demonstration was made by the numbers who attended it, and by whom he was held personally in great esteem, respect, and friendship.

Sir John Eardley-Wilmot gave up his office on the 13th October, 1846, and died on the 3rd February, 1847. From the 14th October, 1846, to the 25th January, 1847, the colony was administered, pending the arrival of the next Lieutenant-Governor, by C. J. Latrobe, as Administrator. Mr. Latrobe had already filled a vice-regal position in Victoria. Sir William Thomas Denison, afterwards Governor-General of New South Wales, took over the administration of the colony on the 26th January, 1847, and relinquished it on the 8th January, 1855.

Governor Denison's administration marks a turning point in the history of the Colony. One of his first acts after assuming office was the restoration of their seats in the Legislature to the "Patriotic Six," who had resigned their office from conscientious motives, as already narrated. This step received the cordial approbation of Earl Grey, who was then Secretary of State for the Colonies. In other directions, however, the Governor did not acquit himself so well. When Earl Grey desired his advice concerning the advisability of granting Responsible Government, the new Governor expressed himself in no unmeasured terms against the proposal. Again, when the Colonial Office authorities requested his views with reference to the transportation question, Sir William Denison strongly urged that the discontinuance of the "system" was against the best interests of the young colony. The Governor, indeed, made a bid for the support of a very influential party. This was composed of those flock-masters and land-holders, who considered that cheap labour, together with a large annual outlay in the colony of Imperial funds, totally outbalanced all the evils and horrors of convictism. The Governor lent all the weight of his position and official influence to the convict labour people, and did everything in his power to put their views prominently before the Imperial authorities; nay, more, he went even so far as to represent the wishes of the pro-convict party as those paramount in the Island. Fortunately, however, at that particular juncture in affairs, the Colonial Office did not always concur in the expressions of opinion of some of its vice-regal advisers in the Australias; and it even seemed probable at one time that the system would be abolished by the Imperial authorities upon their own initiative. However, these kindly counsels were not of long duration, and the sanguine expectations of the abolitionists were cruelly disappointed by the sudden appearance in the Derwent River, on the

12th November, 1848, of the transport convict-ship "Ratcliffe," with 248 prisoners. The people of Hobart Town authorised their leading citizens to wait upon Governor Denison and strongly protest against the landing of any more of the unfortunate wretches in the ports of the colony. The objection was eloquent, but ineffectual. In the course of the year 1849 no fewer than twenty convict transports sailed into the Derwent estuary, bringing with them 1,860 prisoners to add to the population of the Island.

In the meanwhile the Imperial authorities had made attempts to land convicts at various Colonial ports, viz., at Cape Town, at Sydney, and at Melbourne. In each instance the inhabitants of these cities had successfully resisted the threatened influx of this undesirable element; hence there appeared the probability that "Vandemonia"—as it was derisively called—would become the sole receptacle of the accumulated moral garbage of the people of the British Isles. But in this emergency the Rev. John West, afterwards editor of the *Sydney Morning Herald*, arose as the champion of the abolitionist party. To him was due in great measure the organisation of the Anti-Transportation League, and his efforts secured the hearty co-operation of the other Australasian colonies. The Governor bitterly opposed the spirit of the league, and actually went so far as to affirm that the continuance of the "system" was both necessary and desirable; but public opinion, not only in Australia, but also in Great Britain itself, had come to the decision that transportation must be abolished, and abolished at once.

Van Diemen's Land shared in the Act passed by the Imperial Parliament in 1854 for the better government of the Australian Colonies. Among its provisions was one for the establishment of a Legislative Council in the Island. This body was to consist of eight Members, nominated by the Governor for the time being, and sixteen to be elected by the people—in all, twenty-four Members; but Sir William Denision was a resolute and consistent antagonist of any measure of Responsible Government, and one of his last acts as the ruler of the colony was one which no Responsible Government would have sanctioned. Prior to bringing into operation the provisions of the Act passed by the Imperial Parliament for the better government of the Australian Colonies, the Governor took upon himself the responsibility of proclaiming certain land regulations, which had the effect of throwing very large areas of valuable territory into the hands of a very small number of lessees. Sir William Denison defended his action by asserting that it was his intention thereby to promote agricultural settlement in combination with pastoral enterprise. His regulations had quite a contrary tendency, and had the effect of preventing enterprise of any kind. The small farmer, the true developer of virgin land, was effectually debarred from access to the soil, and internal expansion and progress was seriously retarded. As one consequence of Denison's land policy, an emigration of young men began, and continued steadily for years; while the domestics of the

neighbouring colonies were also recruited from the ranks of the young women born in the Island. When Mount Bischoff was discovered, there were actually no local diggers to work it, the mines being exploited, with very few exceptions, by Victorian labour imported from Clunes, Creswick, Mount Blackwood, and the Blue Mountain Gold-fields.

The new Legislative Council, established under the Imperial Act passed in 1850, did not assemble for the despatch of business until the 1st January, 1852. One of its first acts was the passing of a resolution condemning the continuance of the system of convict transportation. The passing of this resolution was deeply resented by Sir William Denison, and he denounced it in no unmeasured terms. Nevertheless, the "Patriots," confident of the moral support of the greater number of the colonists, resolved to take their grievance before Royalty itself, and thereupon addressed a memorial to the Queen, praying her to abrogate the Order in Council authorising transportation to Van Diemen's Land. The Governor forwarded the document, but at the same time advised the Home authorities to the effect that compliance with the request of the petitioners would be against the best interests of the colony, and would in no way improve the moral condition of its people. The Council then met and carried a vote of want of confidence in the Governor. This vote was embodied in a second petition to the Throne, and the humiliating task of forwarding it devolved upon His Excellency. In spite of this, however, Sir William persisted in sending despatches to England belittling the influence and character of the members of the Council. As a matter of fact, the Governor entirely misconceived the strength of the Anti-Transportation movement, and the earnestness of popular sentiment that gave it birth. But, as has been previously remarked, the British authorities were not always in accord with the views of the Governor on matters of colonial policy, and the Duke of Newcastle informed the Council that transportation to Van Dieman's Land had been definitely abolished. The despatch conveying this gratifying intelligence was officially made known through the columns of the *Hobart Town Gazette* of May, 1853.

Meanwhile the discovery of payable gold in New South Wales, in 1851, followed by similar finds in Victoria, caused a wild rush from all parts of Australasia, and indeed of the world, to the gold-bearing localities. The people of Van Diemen's Land were infected by the gold-fever, and an exodus set out to the scenes of the "rushes" which threatened almost to depopulate the Island. Amongst those who quitted Tasmania were many of its convict population. In the year 1842 the total population was recorded as 40,767. Under the incessant drain to the gold-fields of Victoria it fell to 22,261. Those who remained in the Island, however, reaped a rich harvest from their unadventurousness. In Victoria, consequent upon the great rush of population to the gold-fields of that colony, in combination with the enormous finds of the precious metal, a remarkable inflation of

prices had taken place. This necessarily reacted on the marketable value of every description of produce raised in the island colony. Only limited supplies of food and merchandise were at first available, and the demand was insistent and clamorous. Every kind of grain, and fruit, flour, vegetables, hay and fodder of all sorts, timber, building materials, and the various other necessities of civilised life, commanded prices that sounded bewilderingly fabulous to ears attuned to the narrow needs of a primitive agricultural community. Land increased greatly in value, and the producers who stayed behind prospered exceedingly. The imports and exports of the colony experienced a noteworthy expansion, as did also the public revenue. In 1852 the colony was able to show a surplus of £62,000 over expenditure, while the tonnage of shipping engaged in the external commerce of the Island was more than double that of a decade before. In 1853 the value of the colony's imports was upwards of £2,250,000, or some £100 *per capita* of the entire population, and this sum was nearly balanced by the value of the exports.

Affairs were now in such a prosperous condition that the time seemed peculiarly appropriate for the celebration of a jubilee festival. The occasion was commemorative of a double half-century event—the foundation of the colony, and the cessation of transportation to its shores. The day selected for the celebration was August 10th, 1853, and was marked, not only by public festivities, but by religious services in the various churches. To mark a turning-point in the history of the colony, and to break off in a manner all associations with a dark and dishonoured past, the colonists were desirous of changing the name of their Island from Van Diemen's Land to Tasmania, in honor of the intrepid Dutch discoverer who first visited its shores; and this change of nomenclature was shortly afterwards legalised by a vote of the Legislature. Nevertheless, although the Island was thus dissevered from a name that was redolent of infamy, the evil consequences of the old penal system yet remained. The convict element had been greatly reduced by immigration to Australia, but it was still sufficiently strong to be a standing menace to a peaceful, orderly, law-abiding, and industrious population. When the more hardened of the criminals escaped from confinement, and deliberately embraced a career of rapine and violence in the bush, they hesitated at the commission of no atrocity in the prosecution of their nefarious designs;—indeed, the bushrangers of Tasmania were no whit better than their predecessors in the old penal days of "Vandemonia." Their vile deeds, too, were not only practised in Tasmania; but occasionally escaped convicts crossed over Bass' Straits in stolen boats, and continued their lawless career on the diggings and elsewhere on the mainland.

On the 8th January, 1855, Sir William Thomas Denison was succeeded by Sir Henry Edward Fox Young, who came to the Island fresh from the Governorship of South Australia, where he had served a successful term of office extending over six years. On the 17th

January of the same year the Lieutenant-Governorships of Victoria, South Australia, and Tasmania became Governorships. The last mentioned colony became officially so named by legislative enactment in the year 1854. From the foundation of the Island as a British colony under Colonel David Collins, in 1804, to the departure of Sir William Denison, the highest authority in the country bore the official title of Lieutenant-Governor, while the Governor of New South Wales retained the title of Governor-in-Chief. Van Diemen's Land was, however, independent of the mother colony from the date of the establishment of a separate Government in 1825-6; the difference in the rank of the two officials being rather a matter of precedence than connection in any governmental sense, though the Governor-in-Chief was the authority to whom the Lieutenant-Governor was expected to appeal in times of difficulty or perplexity. Sir H. E. F. Young was the first Governor-in-Chief of the Colony of Tasmania, and Sir William Denison was the last Lieutenant-Governor of Van Diemen's Land. Under the rule of the latter, the colony had secured the cessation of transportation; had had bestowed upon it by the Imperial Parliament a larger measure of constitutional self-government; had celebrated its first fifty years of history as a British settlement; and had changed its name in the hopes of a future brighter and better than its past. With the advent of the new ruler, Tasmania may be regarded as in truth definitely finishing with the old order of things, and opening the second volume of its history. Sir H. E. F. Young guided the course of the colony from the 8th January, 1855, to the 10th December, 1861, a period of nearly seven years.

It was a happy and prosperous juncture at which the new Governor took up his duties. The revenue was in a satisfactory condition; discoveries of coal had been made in the Island; the timber getters were busy throughout the colony procuring slabs and shingles and other building materials, and props for the miners in satisfaction of the large Victorian demands; all interests seemed to be on the up-grade, and there were considerable arrivals of immigrants from Great Britain and Ireland. As a sign of the prosperity of the colony may be mentioned the raising and transmission to London of the sum of £25,000, the donation from the Tasmanians to the fund raised for the relief of the widows and orphans of the soldiers who had fallen in the Crimean War.

A few months after Governor Young's arrival, Tasmania received a full measure of Responsible Government. By an Act of the Imperial Parliament, which received the Royal Assent on the 1st May, 1855, a Constitution was bestowed upon the colony. This provided for the creation of two Houses, both of them elective—namely, a Legislative Council of fifteen members, and an Assembly of thirty members. The functions of the new Parliament included the imposition of taxation, the expenditure of revenue, the complete control of Crown lands, and the absolute management of public business by a responsible ministry

answerable to the people through their representatives. Under the new Constitution the Governor became, of course, merely the representative of Majesty. The Legislative Council passed an Electoral Act to give due effect to the provisions of the Imperial Statute conferring the Constitution, and was then relieved of its restricted functions by the Governor in a farewell address.

In the month of September, 1856, the first general election took place in the Island, and the first Responsible Government of Tasmania was formed. The Cabinet was composed of five members holding office, and one without a portfolio. The first Premier was Mr. W. T. N. Champ, and his colleagues were Messrs. T. D. Chapman, Treasurer; F. Smith, Attorney-General; J. W. Rogers, Solicitor-General; H. F. Anstey, Minister for Lands and Works; and W. E. Nairn, without portfolio. Justice Howe was elected President of the Legislative Council, and Captain Fenton Speaker of the Legislative Assembly.

Suddenly, however, the prosperity of the colony, hitherto so gratifying, declined, and the new Parliament was called upon, almost at the outset of its career, to meet serious financial difficulties. The strangeness of the situation, and the total inexperience of the freshly-elected members, precipitated a crisis, and the two Houses found themselves engaged in an undignifying squabble over the imposition of taxation. The Legislative Assembly, like that of the colony of Victoria at a later date, claimed the right to impose and collect Customs duties by a mere resolution of a majority of its own members, without reference to the Upper Chamber. This led, after a tenure of office lasting only four months, to the resignation of the first ministry. The second Responsible Government had even a shorter command of the Treasury Benches, and had to succumb after being in power for only eight weeks; but after a reasonable period for experiment—a stage all young Legislatures have to pass through—the new Parliament got genuinely to work, and proceeded to pass measures for the promotion of higher education; for the incorporation of municipalities in country districts; for the settlement of the people upon the land; and for the establishment of telegraphic communication between the northern and southern parts of the Island.

Sir Henry Edward Fox Young's term as Governor-in-Chief of Tasmania ended on the 10th December, 1861, and Colonel Thomas Gore Brown, C.B., entered on the duties of his office on the day following, as Administrator. This position he continued to hold until the 16th June, 1862, when he became Governor-in-Chief, and, as such, ruled the colony until the 30th December, 1868, his total tenure of office lasting a trifle over seven years.

During the years 1862 and 1863, though much was done by way of developing the interior of the colony by the making of roads and the construction of bridges and tramways, and by other methods for bringing the outlying districts into communication with the market centres, questions of finance chiefly occupied legislative consideration. The

press and the public showed also an unusual interest in the discussions that arose, for they concerned, in an emphatic manner, the future welfare of the country, particularly as regards the settlement of the land and the incidence of taxation. The Treasurer of an Administration formed in the year 1863 was Mr. Charles Meredith, who submitted to Parliament a financial scheme for the abolition of all Customs duties (excepting those imposed upon fermented and spirituous liquor and upon tobacco), the freedom of shipping from all harbour dues and wharfage rates, and the creation of revenue by the imposition of an income and property tax of five and one-half per cent. Mr. Meredith's scheme was doomed from the first, owing to the opposition of the landed interest. Had it been carried into effect, its supporters claim that it would have transformed Hobart Town into a maritime *entrepôt* "as populous and prosperous as the towns in the Middle Ages," and have raised Tasmania into a position of premier importance; and subsequent writers declare that it would have averted the undeniable condition of stagnation that for long years brooded over the island, and which undoubtedly sprang from the locking-up of the country in huge and unused tracts of magnificent territory. Whatever might have been the result, the proposal was not destined to become law, for the Treasurer's scheme was negatived by the Legislative Assembly, and was not again proposed.

In 1865 a most important and valuable measure was placed upon the Statute Book. This was an enactment framed in the spirit and on the lines of the well-known Torrens Act of South Australia, for facilitating the release and transfer of real estate, and making transactions regarding land almost as simple as those connected with portable commodities. In 1867 an Act was passed which had for its object the re-population of the island. Year after year, numbers of young, hardy, and energetic men left the colony, to push their fortunes in the more favoured provinces of the Australian continent. These were the very men whom Tasmania could least afford to spare. To combat this fatal drain upon the population, an Act was passed, under the provisions of which heads of families who paid their own passage from Europe were entitled to receive land orders of the value of £18 for each person over fifteen years of age, and of £9 for each child of more than one and less than fifteen. However, through the great distance of the colony from the old-world centres of population, the cost of the passage out, and the long period of time occupied in making it (as compared with the short and cheap transit to Canada and the United States, together with the liberal inducements held out to immigrants by those countries), little of value in the way of settlement was achieved by this kind of legislation. At about the same time the Government made a bid for settlers of a different stamp. An area of territory, 50,000 acres in extent, was reserved in the county of Devon, for occupation, under certain conditions, by retired Indian officers and their families. Many old warriors accepted the invitation to settle in the colony, but this descrip-

tion of aristocratic and fanciful colonisation did little to develop the genuine resources of the country, which continued to suffer from the drain upon its youth, and the lack of suitable immigrants to replace the lost population.

In 1868 H.R.H. Prince Alfred, Duke of Edinburgh, visited the young colony, and the occasion was marked by great demonstrations of loyalty.

Colonel Gore Brown gave up the duties of his office on December 30th, 1868, and from the date of his retirement till the 15th January, 1869, the Government was administered by Lieutenant-Colonel W. C. Fraser. On the date just mentioned the Administrator was relieved by Charles Du Cane, a son-in-law of the celebrated lawyer and orator, Lord Lyndhurst. During Mr. Du Cane's rule a submarine cable was laid across Bass Strait, and messages to the colonies of the mainland were first despatched by it on the 1st May, 1869. A beginning was also made with the railway system of the colony, and the Western Line from Launceston to Perth, Longford, Westbury, Deloraine, and Formby was under active construction. This route was projected as far back as 1862, and the first sod had been turned by the Duke of Edinburgh in 1868.

With the granting of Responsible Government much of the vehemence and picturesqueness of the "Old Colonial Days" disappeared, happily for the welfare of the island, never to return. Deeds of blood and violence gradually became less and less frequent, and the colony receded into a condition of calmness approaching stagnation—a quiescence in which legislation also shared.

In 1870 the Imperial Authorities withdrew the military forces from the various colonies, and for some time there was an outburst of enthusiasm directed towards the enlistment and drilling of volunteers. The census of Tasmania for this year (1870) showed that the population of the island was such as to require a re-distribution of seats, and the Constitution Act was amended to the extent of slightly increasing the number of members, and lowering the franchise for both Chambers, so as to restore the qualification to many persons who had lost it by the mere depreciation that had taken place in the value of their freehold or leasehold property. In 1870 also a contract was signed for the construction of a main line of railway from Launceston to Hobart Town. In 1871 the Governor opened the Western Line to traffic between Launceston and Deloraine, and communication between the latter and the sea was made almost complete by the laying down of a tramway from Kimberley to Latrobe, at the estuary of the River Mersey. These railways were, however, a source of considerable trouble and annoyance to those who initiated them, and those who provided the funds for their construction. At the time when the Launceston to Deloraine line was being built, that part of the island through which it passed was practically virgin country, in which, although there were a number of small holdings, the great bulk of the land was held in large blocks. The land-owners were anxious for a

railway, and to secure it they not only bore the expense of the survey of the line, but also subscribed a sum of £50,000 towards the cost of construction. The Government, however, declined to guarantee the interest on the loan to be raised for building the line, unless the residents of the district through which it was to be laid would agree to the imposition of a special rate upon their property, productive of £32,500, by way of security for repayment of loan interest. The associated landholders consented, and the work of railway construction was entered upon. After the line was made it turned out to be altogether unremunerative, and the Government sued the guarantors for the sum of £36,000, unpaid interest, but eventually agreed to take over the line, write off £48,000, the amount to which interest had accrued, and to debit the district with the sum of £15,000 per annum, as a current contribution to the interest fund.

While the trouble was in progress in connection with the Launceston to Deloraine line, the railway between the northern and southern capitals had been begun. The cost of construction and maintenance of this line was to be made a charge on the whole of the taxpayers of the colony. The land-owners who had guaranteed the interest on the Deloraine line naturally objected to the imposition upon them of a special rate, while the people served by the main line escaped without any special contribution, the sum to be paid by the Government to the company owning the line under the guarantee being drawn from the general revenue. When, therefore, the tax became due, and an effort was made to collect it, the Government found that the people refused to pay. Then legal proceedings were instituted, and fines and penalties threatened, but with little result, save that of further aggravating a difficult situation. Sixty-five of the local magistracy petitioned the Governor for the suspension of the tax and penalties until Parliament could be appealed to. An unfavourable answer being given to this request, twenty-six of the petitioners resigned their commissions. Upon this ensued a unique state of affairs. No fewer than 1,200 distress warrants were issued, and enforced wherever enforcement was possible. The north of the island was practically in a state of siege and the Government was confronted by a people who had determined not to yield. Large quantities of portable goods were seized by the officers of the law and taken to Launceston, a proceeding that greatly angered those who were thus deprived of their property. Parties were organised for the rescue of the effects distrained upon, and indeed so furious had grown the indignation thus stirred up that the dwellers in the town feared loss of life or limb, or homestead, at the hands of the recalcitrant taxpayers. The demonstration grew so turbulent and riotous that the authorities found it necessary to withdraw the police from their customary beats, and to swear in special constables for service in the turbulent districts. The inoffensive and unoffending residents of Launceston had their windows smashed in, their doors battered to fragments, and their fences torn down by the infuriated owners of the

deported chattels. In the country districts the efforts of the police were simply laughed to scorn by men who had not feared to encounter and defeat armed desperadoes. In the end the Government saw that their position was untenable, and the enforcement of the law inexpedient. In the following year an Act was passed which absolved the land-owners of the district from the obligation of raising a special rate to be used for railway purposes. Thus ended a peculiarly painful position, created by the unwise action of a legislative body, for however proper it might have been to impose local taxation to meet the deficiency of earnings on the Deloraine railway, the conditions became entirely altered when the deficiency of other railways became a charge upon the general taxpayer.

In the year 1872 discoveries of gold were made both in quartz reefs and in alluvial deposits at Brandy Creek (afterwards called Beaconsfield), at Lefroy, and at other places which have since become well-known as important gold-fields. Silver and tin were found in abundance, and Mount Bischoff (discovered in 1872 by James Smith) has the proud pre-eminence of being considered the richest tin-mine in the world.

Governor Du Cane left the colony on the 28th November, 1874. Until the arrival of Governor Weld on the 13th January, 1875, the Government was successfully administered by Sir Valentine Fleming and Sir Francis Smith.

The next Governor, Mr. F. A. Weld, had received a long training in colonial politics in New Zealand, and had served a successful governorship in Western Australia. With his advent to office in Tasmania he found that changes of Ministry were of almost annual occurrence, that party politics ran high, and that the best interests of the colony were neglected in the scramble for the Treasury benches. A staunch believer in a strong public works policy, the Governor set himself to work to convert the Government of the day to his progressive views, and had the satisfaction, at the end of the year 1877, of obtaining the assent of both Houses to a Bill appropriating the sum of £140,000 to the formation and construction of roads, bridges, wharfs, and telegraph lines in hitherto neglected districts. A succeeding Administration, with Mr. Giblin as Premier and Treasurer, managed to effect a re-organization of the colony's finances, and by the imposition of a tax on real and personal property and the dividends derived from the operations of public companies, an excise duty of 3d a gallon on beer, and a revision of the Customs tariff, brought about an equality between revenue and expenditure.

In the year 1876 the railway line connecting the northern and southern capitals was opened to traffic. On the 8th May of the same year died Truganini, a female aboriginal, the last representative of the Tasmanian race.

During Governor Weld's term of office many important mineral discoveries were made. Amongst these was the famous auriferous quartz reef discovered by William Dalby in 1877, and now worked by the Tasmanian Gold-mining Company.

Governor Weld was called away to the Governorship of the Straits Settlements in the month of May, 1880, and the colony was temporarily administered by the Chief Justice, Sir Francis Smith. He was relieved in the month of October following by Sir J. H. Lefroy, who remained in the colony until the month of December, 1881. With the exception of a sharp conflict between the two Houses of the Legislature over questions of taxation in 1882, there is little left to record of importance. Sir J. H. Lefroy's term of administration ceased on the 6th December, 1881, and on the following day Major Sir George Cumine Strahan was sworn in as Governor, and continued in office till the 28th October, 1886.

During the period extending from 1882 to 1889 valuable discoveries of mineral deposits were made in the western portion of the island, notably silver-lead at Mount Zeehan in 1885; gold and copper at Mount Lyell in 1886; and silver and lead at Heazlewood River in 1887. This period was also marked by considerable activity in railway construction. In 1886 a law was passed which had the effect of greatly extending the franchise. The number of members of both Houses of the Legislature was increased—from 16 to 18 in the Legislative Council, and from 32 to 36 in the Assembly. At the same time the boundaries of the Electoral Districts were re-arranged so as to give more effective representation in accordance with the distribution of population.

Sir George Strahan retired from office on the 28th October, 1886. Until the return from England, in November, of the Chief Justice, Sir William Dobson, the Government of the colony was administered by Judge Giblin. The Chief Justice continued the administration till the arrival of Governor Strahan's successor, Sir Robert Hamilton, who assumed office on the 11th March, 1887.

The unsatisfactory relations which had so long existed between the Government and the Tasmanian Main Line Railway Company were terminated in 1890 by Government purchase of the line for a sum of £1,106,500, payable in $3\frac{1}{2}$ per cent. inscribed stock. The year 1890 also witnessed the foundation of the Tasmanian University. As it was thought that the interests of higher education would be more satisfactorily promoted by a local University, the Council of Education was abolished, and in lieu of the Tasmanian scholarships Parliament granted an annual sum to the funds of the new institution.

Sir Robert Hamilton's term of office expired in October, 1892, and he was succeeded by Viscount Gormanston, who arrived in Hobart in the following year. Since 1890 the colony has made excellent progress as the following pages show. Much of this progress has been due to the marvellous development of mining on the west coast, where a population of 25,000 has settled between Strahan and Dundas, all maintained by the Mount Lyell and Zeehan mines.

In the following table will be found a list of the successive Ministries which have held office since the inauguration of Responsible Government in Tasmania, together with the dates of their appointment and retirement.

No. of Ministry.	Name.	Date of Appointment.	Date of Retirement.	Duration.	
				Months.	Days.
1	Champ	1 Nov., 1856	26 Feb., 1857	3	25
2	Gregson	26 Feb., 1857	25 April, 1857	1	30
3	Weston	25 April, 1857	12 May, 1857	0	17
4	Smith	12 May, 1857	1 Nov., 1860	41	20
5	Weston	1 Nov., 1860	2 Aug., 1861	9	1
6	Chapman	2 Aug., 1861	20 Jan., 1863	17	18
7	Whyte	20 Jan., 1863	24 Nov., 1866	46	4
8	Dry	24 Nov., 1866	4 Aug., 1869	32	21
9	Wilson	4 Aug., 1869	4 Nov., 1872	39	0
10	Innes	4 Nov., 1872	4 Aug., 1873	9	0
11	Kennerley	4 Aug., 1873	20 July, 1876	35	16
12	Reibey	20 July, 1876	9 Aug., 1877	12	10
13	Fysh	9 Aug., 1877	20 Dec., 1878	16	11
14	Crowther	20 Dec., 1878	29 Oct., 1879	10	9
15	Giblin	30 Oct., 1879	15 Aug., 1884	57	16
16	Douglas	15 Aug., 1884	30 Mar., 1887	31	15
17	Fysh	30 Mar., 1887	17 Aug., 1892	64	18
18	Dobson	17 Aug., 1892	14 April, 1894	20	28
19	Braddon	14 April, 1894	12 Oct., 1899	65	28
20	Lewis	12 Oct., 1899	.....	..	...

NEW ZEALAND.

THE Maori name of New Zealand is "Ao-tea-roa" (the long white cloud); for the North Island, "Te-ika-a-Maui" (the fish of Maui); for the South Island, "Te-wai-pounami" (the place of the greenstone); and of Stewart Island, "Rakiura."

Of all the tribes native to the "seven colonies" the Maoris of New Zealand alone have given serious trouble to the white population. From the visit of Tasman to Murderer's Bay to comparatively modern times, the Maori has been a menace to European colonisation. He alone of all the Australasians dared defend his own with a courage, a pertinacity, and a skill which have extorted the admiration, and frequently compelled the terror of the white invader. Though not aboriginal to New Zealand, he is so identified with the history of the Islands from our first knowledge of them, that it is convenient to consider him briefly before touching on the earliest advent of the European explorer in the waters of "Ao-tea-roa."

Much doubt exists as to the ancient cradle of the Maori race. Many theories have been advanced on this subject, but the favourite one appears to be that which gives as their place of origin some island of the Samoan Group, or, as their own traditions designate the place of their exodus, "Hawaiki." The legend runs that a chief of Hawaiki left the island after a civil war, voyaged to New Zealand (Ao-tea-roa), and returned thence to the land of his birth with marvellous accounts of all he had seen in his adventurous journey, and of the wealth of the new country that he had visited. This daring navigator was named either Kupe or Ngahue; but though traditions vary concerning this, they concur in making him the leader of the expedition that planted his race in its present home. Tasman describes the natives of Golden or Murderer's Bay as being possessed of double canoes, though when the country was annexed, some 200 years afterwards, the Maoris had forgotten how to build them. It is, however, quite possible that they journeyed safely over the thousands of miles of open ocean which separate New Zealand from the tropical islands of the Samoan group in these typical vessels of the South Sea Islands. The Maori race is brown in colour, handsome of feature, and evidently identical with the people who have spread throughout the broad Pacific from Hawaii to Rarotonga, and who have in some of the groups mingled their blood with that of inferior Melanesian peoples. Recently a well-known authority states that ethnological investigations seem to point to the fact that prior to their occupation of the islands in

the Pacific referred to in Maori tradition, the race originally dwelt on some mainland—probably on the plains and foothills of the Himalaya Mountains of India.

When Cook landed he found the islands apparently crowded by a dense population. This appearance was, however, misleading, and merely arose from the tendency of the Maoris to cluster along the shore line and at the mouths of rivers. It has since been computed that the total number of Maoris at that time could not have been more than 150,000, which lessened to 80,000 by 1840, and has now further shrunk to considerably less than half that number. Except on the shores of Cook's Straits, they only planted a few scattered outposts in the South Island. Yet that was the larger island of the two. It is also the colder, and therein lies the chief secret of the check to the Maori increase. They were a tropical race transplanted into a temperate climate. They showed much the same tendency to cling to the North Island as the negroes in North America to herd in the Gulf Straits.

Respecting their antiquity as an important race from a Polynesian habitat, it is noteworthy that the names of most of their canoes are still remembered, and each tribe agrees in its account of the doings of the people of the principal canoes after their arrival in New Zealand; and from these traditional accounts the descent of numerous tribes has been traced. Calculations, based on the genealogical staves kept by the "tohungas," or priests, and on the well-authenticated traditions of the people, indicate that about twenty-one generations have passed since the immigration, which may, therefore, be assumed to have taken place about 525 years ago. The position of the legendary Hawaiki is unknown, but many places in the South Seas have been thus named in memory of the mother-land. The Registrar-General of New Zealand notes that the Maoris speak a very pure dialect of the Polynesian language—the common tongue, with more or less variation, in all the Pacific Islands; and that Captain Cook, when he first visited New Zealand, availed himself of the services of a native of Tahiti, whose speech was easily understood by the Maoris, and who thereby obtained from them much of their traditional history. Cannibalism existed in New Zealand from the earliest periods known to Europeans, and sailors belonging to the expeditions of Tasman, Cook, and others met their fate in this way. The custom of eating the bodies of enemies killed in battle obtained up to a very late period. The practice of tattooing was general in the early days of European colonisation, but it is now rapidly dying out among the younger generation of Maoris.

Tasman had been sent out by Anthony Van Diemen, the Governor of the Dutch possessions in the East Indies, on a voyage of discovery in search of new lands for exploitation by the States General of Holland. He was furnished with a yacht, the "Heemskirk," and a flyboat, the "Zeehaen" (or "Sea Hen"), under the command of Captain Jerrit Jansen. He left Batavia on what has been designated by

Dutch historians the "Happy Voyage," on the 14th August, 1642. After a visit to the Mauritius, Tasman bore away to the south-east and discovered Van Diemen's Land, on the 24th November; then resuming his voyage in an easterly direction he sighted the west coast of the South Island of New Zealand on the 13th December of the same year, and describes the coast line as consisting of "high mountainous country."

Tasman was under the belief that the land he saw was part of a great polar continent discovered some years before by Schouten and Le Maire, to which the name of Staaten Land had been given. He, therefore duplicated the designation; but within three months afterwards Schouten's "Staaten Land" was found to be merely an inconsiderable island. Tasman's discovery thereupon received the name of New Zealand, on account of a fancied likeness to a province of Holland to which it bears not the least resemblance, and by this name it has been known ever since. Tasman sailed along the coast to a bay, and there he anchored. This inlet is known as Golden or Massacre Bay, called by Tasman Murderer's Bay. Here an unprovoked attack by the Maoris on a boat's crew resulted in the death of four of Tasman's sailors. Leaving Murderer's Bay, Tasman steered along the west coast of North Island. Vainly seeking a passage to the east, he passed and named Cape Maria Van Diemen, finally taking leave of New Zealand at North Cape. At the Three Kings Islands he made an attempt to land, but the ferocious aspect of the natives terrified his boat's crew, and the voyage was resumed. Tasman left New Zealand with a most unfavorable impression of its inhabitants. He had been off the coast for some three weeks without landing or planting the flag of his country thereon, and more than a century and a quarter elapsed before another European is known to have visited New Zealand.

Captain Cook, in the course of his search after a new continent, and after having observed the transit of Venus at Tahiti, sailed south and re-discovered Tasman's Staaten Land in the barque "Endeavour," on the 6th October, 1769. In the words of an admiring panegyrist, "He found New Zealand a line on the map, and left it an archipelago."

The point of the eastern coast of North Island, New Zealand, first sighted by Cook, he named "Young Nick's Head," after the look-out lad who first gave the cry of "Land-ho" from the truck. On the 8th October he cast anchor in Poverty Bay, so-called from the hostility of the natives, and their lack of manifested hospitality.

The expedition had thus far been sailing southward. Dissatisfied with the results, and finding it difficult to procure water in sufficient quantities, Cook put about, determining to follow the coast to the northward. He named a promontory in the neighbourhood Cape Turnagain. Another promontory more to the north, where a huge canoe made a hasty retreat, he called Cape Runaway. In the month of November he touched at a point on the coast, where he landed and erected an observatory for the purpose of observing the transit of

Mercury—one of the chief objects of his expedition on that occasion. A signal station was erected on the headland from which Cook took his observation, and which is now known as Shakespeare's Head. On the 9th of November the transit of Mercury was successfully observed, and the name Mercury Bay was given to the inlet where the observation was made. Two localities, for reasons which will be obvious, were called Oyster Bay and Mangrove River. Before leaving Mercury Bay, Cook caused to be cut upon one of the trees near the watering-place the ship's name and his own, with the date of arrival there, and, after displaying the English colours, took formal possession of it in the name of His Britannic Majesty King George the Third. It is noteworthy that Cook always managed to obtain wood and water wherever wood and water were to be had, no matter whether his intercourse with the natives were friendly or otherwise. He also contrived to carry on his surveys in spite of all opposition with such accuracy and deliberation that they remained the standard authority on the outlines of the islands for some seventy years or more. He was, moreover, a benefactor in no mean degree to the natives, who seldom knew the meaning of meat, save at a cannibal feast after a tribal victory. He not only improved their vegetables by giving them seed potatoes, but he turned loose fowls and pigs to supply their flesh larder. To the time of writing, the wild pigs which the settlers shoot in the forests and in the mountain gorges are called after Captain Cook, and they furnish many a solitary shepherd, miner, farmer, and gum-digger with excellent meat. Cook was, perhaps, either more prudent, or more successful, than his consort Captain Tobias Furneaux, of the "Adventure," who, in a subsequent voyage to New Zealand, lost an entire boat's crew of nine men, who were captured or killed, and duly cooked and eaten by the Maoris.

On the 17th December, the "Endeavour" doubled North Cape, which is the northern extremity of North Island, and began the descent of its western side. The weather now became stormy, and with a repetition of Tasman's experience from an opposite course on the same coast, very dangerous. Often was the vessel compelled to stand off in great distress, and intercourse with the natives was considerably interrupted. At one point, however, the English mariners satisfied themselves that the inhabitants ate human flesh—the flesh, at least, of enemies who had been killed in battle. On January 30th, 1770, Cook erected a flagpost on the summit of a hill in Queen Charlotte's Sound, where he again hoisted the Union Jack, and, after naming the bay where the ship was at anchor after the Queen, took formal possession of the South Island in the name of His Majesty King George the Third.

Cook crossed the waters of Doubtless Bay on the same day that the French Captain, De Surville, in the "St. Jean Baptiste," was approaching the land at Mangonui. A few hours afterwards, and totally ignorant of Cook's presence in New Zealand waters, the Frenchman anchored in this very inlet, and named it Lauriston Bay. This navi-

gator was sent out by his Government, who believed that the English had found "an island of gold" in the South Seas, and sailed post haste from India to see if he could not participate in the exploitation of the precious metal. He was received by the natives with great hospitality; but, finding nothing more valuable than spars for his ship, he proceeded to South America, carrying away in irons the Rarawa chief, Ngakinui, who had entertained him and his sick seamen with great hospitality while on shore. Ngakinui pined on ship-board for his native food, and died some eighty days after his seizure. De Surville, only eleven days after the death of this unfortunate Maori chief, was drowned in the surf at Callao.

Cook, sent out again by the British Government in search of the supposed Southern, or Austral, Continent, paid another visit to New Zealand waters in 1773; in fact, in the course of the three voyages he made to the South Pacific he visited the country five different times, sojourning there on the several occasions 326 days. His various visits extended from October 6th, 1769, to February 25th, 1777. In the second voyage in the "Resolution" Captain Tobias Furneaux, of the "Adventure," was associated with him.

In 1772 Captain Marion du Fresne anchored his two ships, the "Marquis de Castries" and the "Mascarin," in the Bay of Islands. These vessels formed a French expedition of discovery, sailing from Nantes, on the Loire. Lieutenant Crozet, in command of the King's sloop "Mascarin," had lost his masts, and the two ships put into the Bay of Islands to refit. Du Fresne was frequently on shore during his stay, and habits of intimacy begat in the mind of the French Commander confidence in the friendship of the natives. Both races lived in harmony for several weeks. "They treated us," says Crozet, "with every show of friendship for thirty-three days, with the intention of eating us on the thirty-fourth." The Maori version given by Dr. Thompson is: "We treated Marion's party with every kindness for thirty days, and on the thirty-first they put two of our chiefs in irons, and burned our sacred places." It matters little whether the Maoris had any valid excuse for eating their guests or not; the fact remains that an attack was made on the French, when twenty-eight of their party and the commander were killed and eaten. Crozet, who had a party of men engaged in getting spars in the Kawakawa River, was also in danger of being trapped by the treacherous savages; but being forewarned, he was enabled to punish those who had killed his comrades and sought his own destruction. Before leaving the river he refitted the two vessels, and after a stay of sixty-four days in the Bay of Islands, continued his voyage.

On his return to England, Cook gave a most graphic description of New Zealand and its people. Men engaged in commerce became impressed with the value of the various articles which New Zealand produced, and hence of its importance as a market for manufactured goods; while the savant and the scientist regarded with great interest

the information recently published respecting a race of people who, while having a real though hitherto undescribed form of civilisation, were yet greedy eaters of human flesh. Cook's report of the genial climate, the fertile soil, and the evergreen forests of the new archipelago, not only excited considerable interest in England, but so captivated the eminently practical mind of Benjamin Franklin that the American philosopher published a proposal for its immediate colonisation.

In virtue of the sovereignty established by Captain Cook, the islands were included as a part of the British dominions in the Royal Commission appointing the Governor of New South Wales in 1787. In the following year Captain Arthur Phillip and his little colony of convicts established themselves on the shores of Port Jackson, New South Wales. There is no doubt that the selection of Botany Bay as a place of penal settlement was largely due to Cook's official report as to the suitability of the locality; but it was keenly debated in the House of Commons whether Cook's New Zealand or Cook's Botany Bay should be the site of the first experiment in penal colonisation. "New Zealand," says an early historian, "escaped the perilous distinction, possibly on account of fears entertained that the existence of her ferocious cannibal population might prove incompatible with the safe keeping and probationary discipline of the prisoners, and that in some fatal outburst of the cannibal passion, convict, governor, and guard might undergo the common lot, prematurely, in the native oven." This, possibly, may have been the reason; indeed, the early authorities of New South Wales had a thorough dread of the old-time Maori.

In 1791 Captain Vancouver anchored in Dusky Bay when on his voyage round the world, and in 1793 Admiral D'Entrecasteaux touched at New Zealand in his search for the unfortunate La Perouse. In the latter year, also, the "Dædalus," under the command of Lieutenant Hanson, was sent by the Governor of New South Wales to cruise about the New Zealand coast with the avowed intention of kidnapping one or more Maoris to teach the convict settlers of Norfolk Island the Maori method of flax-dressing. Unfortunately, one of the captives secured was a priest ("tohunga") and the other a chief ("rangatira,") and they would not admit that they knew anything about such work, and were restored to their homes after several months' detention.

In the year 1793, Sydney whalers began to visit the coasts of New Zealand; and adventurous spirits, honest and outlaw, ran into the ports of the islands for spars and flax, preserved human heads, and other native curiosities. Frightful atrocities were at times perpetrated by the Maoris, although it must be admitted that in some cases the knavery and cruelty of the traders were directly responsible for them. In 1807 a vessel had been taken by the east coast natives, and the entire crew, with one exception, were killed and eaten. In 1809 occurred the "Boyd" massacre, when fifty Europeans were murdered at Poverty Bay. In 1816 the brig "Agnes" was stranded in the same locality, and out of a crew of fourteen all save one were killed and eaten.

A remunerative trade in seal-skins was carried on for a time, these being amongst the first articles of export from the then territory of New South Wales, but the unrestricted slaughter of the animals between 1800 and 1820, caused their capture to be no longer a paying enterprise. There was also a trade in timber hewn near the shores of the Hauraki Gulf, and shipped at profitable prices from Sydney to India and the Cape of Good Hope. The Bay of Islands was also the centre of much activity during the palmy days of the whaling industry.

In 1814 the Church Missionaries appeared, and strengthened the feeling of security which had grown up through trade, though New Zealand continued to have the evil reputation of being the Alsatia of the Pacific. Missionary enterprise was made possible by the growing intercourse between the whites and the Maoris. To the islands flocked deserters and shipwrecked seamen, runaway convicts, and all kinds of nondescript adventurers of the "Bully" Hayes type. Sometimes they were promptly killed and eaten; sometimes they were adopted by the natives, and speedily sank below the level of the Maoris themselves, marrying one, two, or three wives according to fancy or the esteem in which they were held by their adopted tribesmen. As trade grew up between the whites and the natives, the "Pakeha Maori," or European, who sold his nation-right for a mess of savage pottage, became an object of competition among the islanders, who found him a useful agent and interpeter. During the latter part of the days of Governor King, from 1805 to 1807, the first natives, amongst them several chiefs, voluntarily went to England and to New South Wales. These visits fired the missionary zeal of Samuel Marsden, who resolved upon acting the part of a St. Augustine to the Maoris. In 1807 Marsden accompanied Governor King to England, to enlist the aid of the Church Missionaries' Society in the establishment of a mission settlement in New Zealand. On his return to the Colony in 1810 he brought with him two lay catechists for his mission, Messrs. King and Hall, a carpenter and an iron-worker. When the missionaries arrived in Sydney the air was filled with rumours of rapine and murder, much exaggerated. These arose out of the horror excited by the ghastly outrage known to history as the "Boyd" massacre—an act of retaliatory vengeance dealt out to the passengers and crew of the ship "Boyd" for the flogging of a chief's son.

It had been proposed by the merchants of Sydney about this time to form a New Zealand Company in New South Wales, and the preliminary arrangements had been completed before tidings of the massacre came to Port Jackson; but when the tragedy was made known the idea was abandoned, and the catechists for the New Zealand Mission proceeded to Parramatta to wait until the public indignation had subsided. Meanwhile Mr. Kendall came to join the mission, but he also was sent to Parramatta with his wife and family, until continued peace on the New Zealand coast begat renewed confidence. During the time of the disorder in the mother colony, brought about

by the quarrels of Governor Bligh with the officers of the New South Wales Corps, a disastrous license appears to have been taken by the shipmasters trading from Port Jackson to New Zealand, which provoked reprisals on the part of the natives, entailing some loss of life.

In the year 1814 Governor Macquarie gave Mr. Marsden leave of absence to go to New Zealand to establish his mission, provided the natives on the east coast of the North Island were reported to be in a peaceful condition. To obtain the necessary information Mr. Marsden despatched the brig "Active" to the Bay of Islands, under the command of Captain Peter Dillon, who subsequently became celebrated for his discovery of the relics of La Perouse and his expedition on the island of Vanikoro. Mr. Kendall accompanied the brig, and several native chiefs returned in her to strengthen the chances of Mr Marsden's visit. On the Governor's being satisfied with the report, the chaplain departed on his three months' leave of absence. He was accompanied by the catechists, Messrs. King, Hall, and Kendall, and a Mr. Nicholas. Mr. Marsden opened his mission at the Bay of Islands on Christmas Day, 1814. The natives had made rude preparations for the event by enclosing half an acre with a fence, erecting a pulpit and reading desk in the centre, covered with native mats dyed black, and using as seats for the Europeans some bottoms of old canoes, which were placed on each side of the pulpit. A flagstaff was erected on the highest hill. After the celebration of the service, which was heard with much decorum and attention, Mr. Marsden preached from the passage in St. Luke, "Behold I bring you glad tidings of great joy." The natives, of course, knew not what he said, so that the sermon was, perhaps, more picturesque in its *entourage* than edifying in its effects. At its conclusion the Maoris indulged in their war-dance, and thus Christianity and cannibalism came into contact. New Zealand was practically proclaimed a dependency of New South Wales by the appointment of Missionary Kendall as Resident Magistrate at the mission station.

After visiting the Thames, Mr. Marsden returned to New South Wales, leaving the catechists at the Bay of Islands. He did not again visit the mission until 1819, when an ordained clergyman, the Rev. S. Butler, was appointed to take charge of the station. The mission brig, the "Active," which had been purchased by Mr. Marsden in 1814, was, however, kept running between Port Jackson and the Bay of Islands, so that the catechists were in constant communication with head-quarters, while the whale ships frequenting the Bay gave some measure of protection by their presence. Acting under instructions from Governor Macquarie, Marsden explored a considerable portion of the northern part of New Zealand. He appears to have been the first European who published a description of the Hokianga River, which had been made known to Governor King from the map of the North Island drawn by the Maoris, Tuki and Huru, on the floor of the Governor's house at Norfolk Island. In the year following he visited

New Zealand in H.M. storeship the "Dromedary," which was sent thither to procure spars for topmasts for the Navy. He remained at North Island for several months, exploring the Thames, Tamaki, and Kaipara districts.

The progress of the missionaries in their task of christianising and civilising the Maoris was at first painfully slow, but it became rapid and general during the ten years preceding the annexation of the islands by the British Crown in 1840.

Marsden had a veritable genius for administration, and he thoroughly believed in the saving efficacy of social organisation. He wished every convert to learn a trade. He himself had been a blacksmith before becoming a chaplain, and his helpers were wielders of tools of iron or steel as well as of the arms of the spirit. He sought to save men's souls by teaching them to dig and delve and to be cunning in the use of saw and hammer. He saw clearly enough that the future of the Maori, temporal and spiritual, lay in the annexation by the British Crown, and to this end he laboured. His ghostly comfort was material enough to be weighed and measured, but he was the man for the situation, and he knew it with the stolid obstinacy characteristic of his Yorkshire blood. Naturally perhaps, but nevertheless unfortunately, some of his coadjutors thought otherwise, and sowed seeds of dissension concerning things immaterial to Marsden's organised scheme of temporal salvation. The Maoris, with their keen imagination, were quick to seize upon quibbles, and sects sprang up as quickly as mushrooms. Rival tribes made it a point of honour to select varying and opposing beliefs, and in contemning the adherents of churches other than their own.

The first difficulty that confronted the missionaries was a translation of the Bible. To obtain this they enlisted the services of a notable convert, Hongi, and another Maori chief. Mr. Kendall went to England, accompanied by Hongi with very opposite views. The preacher wanted aid to put the Maori language into written form, writing being a mode of communicating thought unknown to the native race. Hongi wanted guns and ammunition to enable him to wreak his vengeance on his household enemies; but no word of this escaped him. In the end each got what he wished for. Mr. Kendall obtained the assistance of Professor Lee, who, with Hongi's help, constructed a grammar and vocabulary of the New Zealand language sufficient for the translation projected. On his arrival in England, Hongi was lionised. George the Fourth gave him a suit of armour, and various admirers presented him with guns and other gifts. On leaving England the Government provided him with a passage to Sydney on his way home. On reaching Sydney Hongi took up his residence with his friend, Mr. Marsden, and there met Hinaki, a neighbouring chief, on a visit to the venerable missionary. It appears that while Hongi was in England one of his Ngapuhi tribesmen had been killed by some connections of

Hinaki's people. Here, then, was an immediate opportunity of trying his guns, and testing the invulnerability of his royal suit of armour. Hinaki sued for peace, but Hongi wanted war, and intended to have it. To this end he disposed of all his other presents and converted the proceeds into more muskets and more ammunition. Although Hongi and Hinaki sat at the same table, slept under the same roof, and travelled back to New Zealand on the same ship, none of Hinaki's arguments could induce the blood-lustful chief to abandon his design of having a practical test of the new instruments of warfare which he had procured in England. There was nothing for it, therefore, but for Hinaki to collect his followers on his return home and make the boldest showing possible. When the battle was fought he maintained a brave resistance for some time, but at length the new weapons prevailed, and Hinaki, together with a thousand of his followers, were slain, while numbers were taken captive. Of the slain 300 were cooked and eaten on the battle-field by the victors. Hongi next invaded the territory of the tribes round Mercury Bay, and then proceeded to Kaipara where he made a great slaughter. In 1822 he again visited the Thames and the Waikato, and ascended the Waipa, where he took several large "pahs," and proceeded thence almost to the Wanganui, slaying in this expedition about 1,500 of his enemies. His name spread terror wherever he went, and when remonstrated with by the missionaries he declared his intention of subjugating the whole island. In 1823 he won a victory at Rotorua, when many were slain. In 1827 he declared war against Tara, and the tribe which had been concerned in the "Boyd" massacre, and during the early part of the year his followers plundered and burnt the Wesleyan Missionary Station at Whangaroa. The life of this remarkable savage terminated in March, 1828, from injuries received by a bullet-wound in the preceding year. It has been computed that about 10,000 persons were killed in Hongi's various raids, and some writers have not hesitated to double this estimate.

In the year 1825 the first New Zealand Association was formed in London. It was composed of men of influence, among whom was Lord Durham. A vessel was fitted out for the purpose of exploring the country and conveying settlers to New Zealand. The command of the ship, called the "Rosanna," was given to Captain James Herd, a seaman well acquainted with the New Zealand coast. No later than the year 1822 he had been in the Hokianga River in the ship "Providence," when he witnessed a deed of conveyance of land from native chiefs to one Charles, Baron de Thierry, who, in his absence, was represented by Mr. Kendall. With the exception of Marsden, all the early missionaries seemed determined to do all they could to deprive Great Britain of her sovereignty over the islands. Captain Herd bought two islands in the Hauraki Gulf, and a strip of land at Hokianga. The "Rosanna" arrived in Hauraki Gulf in 1826, reached the Bay of Islands on the 26th October of the same year, and proceeded thence to Hokianga, where a record of this early attempt at colonisation is still preserved in

the designation of Herd's Point. A war-dance at one of the places visited by the "Rosanna" was said to have terrified the immigrants, who insisted upon being carried back to England, a stipulation having been made between them and the company before leaving the port of departure, that they should be reconveyed to England if they disliked remaining in New Zealand; and of all the intending settlers, some sixty in number, only four preferred to remain. The "Rosanna" went to Sydney early in the year 1827, where the stores of the expedition were sold by public auction, and Captain Herd, and those of the party who felt disposed to do so, sailed for England. The cost of this venture is said to have been £20,000.

From 1820 to 1830 was a time far surpassing in bloodshed and ruin anything witnessed in the islands before or since—a result of horror due to the fact that the Maoris had thoroughly learnt the lesson instilled into their minds by the bloody victories of Hongi, and not a "brave" in the North Island but possessed his fire-lock. During the decade between 1830 and 1840, however, New Zealand gradually drifted into a new phase of existence, and began to respond to the dominance of the white man. In England more than one influential believer in the future of Australasia had long been keenly watching the fortunes of New Zealand, and Great Britain was soon to learn that these islands were not indifferent to France also. In 1829 a deputation waited on the Duke of Wellington, then Prime Mniister, to urge that New Zealand should be acquired and settled. His Grace, interestedly advised, flatly refused to think of any such thing. It was then that he made the historic remark that, "supposing New Zealand to be as valuable an acquisition to the Crown as the deputation wished to make out, Great Britain had already colonies enough." It is noteworthy that the capital of New Zealand is named after the great man whose sole connection with the colony was a flat refusal to include it in the Empire. The singular indifference of English statesmen to the great possibilities of New Zealand is now a matter for marvel. The truth is, that the missionaries stood in the way of annexation, and they were listened to. They represented the one element of self-sacrifice in a community of greed and lust; but they were, after all, only human. They had tasted of the sweets of power, and represented all the vague majesty of British authority, and they were loth to lose pride of place and privilege—and annexation meant nothing less to them. By a singular obtuseness the Governors of New South Wales gradually relaxed their supervision of New Zealand as a dependency of the mother colony—a sin against patriotism which the governing missionaries in North Island did their utmost to encourage—and "No Man's Land" was rapidly becoming British only by virtue of the nationality of those who exploited it. The white inhabitants of New Zealand comprised at this time four classes—first, the missionaries and their immediate dependents; second, the "Pakeha Maoris" or de-civilised whites who had thrown in their lives and their lots with the native race; third, the whalers and sealers of

the South Seas—mere birds of pleasure and passage; and fourth, the traders and others settled at the Bay of Islands. In the last-named beautiful inlet had been founded a marine Alsatia, a Bohemia of villainous license, known as "Kororareka" (now Russell), where, on occasion, as many as a thousand whites indulged in unbridled and brutalising debauchery, no fewer than thirty-five large whaling ships at a time lying off its beach in the Bay. Matters, indeed, had reached such a pitch that the better-disposed of the inhabitants formed themselves into a vigilance committee, each member of which attended the meetings armed with musket and cutlass.

In 1830, so horrible had become the outrages of the traffic in preserved and tattooed human heads, that Governor Darling prohibited the commerce, and, inferentially, the secret murders due to it, by attaching a penalty of £40, coupled with exposure of the name of the trader who should engage in it. The missionaries, utterly powerless to stem or turn this gathering flood of vice and violence, were moved in 1831 to induce the various chiefs of the neighbourhood to petition the British Government for some protection and repressive aid; and it was high time, as the annals of the period show, though on rare occasions constituted lawlessness could be enlisted in upholding constituted authority, yet, even then, at the expense of the extinction of every sentiment of pity or mercy. Thus, a Sydney vessel, having eighty convicts on board, anchored in the Bay of Islands, when it transpired that the outlaws had overpowered their guard, and, seizing the craft, managed to navigate her to New Zealand. On their arrival, an old trader named Duke, with the assistance of a number of Maoris whom he had enlisted in his service, immediately boarded the vessel, fought and conquered the felon barrators, and took them back to Sydney, where nine were duly hanged for their offence. A type of the class of ruffians, the most infamous of all, who frequented New Zealand waters at this period was a trader named Stewart. This fiend in human shape formed a most bloodthirsty compact with a Maori chief named Te Rauparaha, famed alike for craft and cruelty. The chief's father had been slain in an incidental fray by the Maoris of Kaiapoi in the South Island, and Te Rauparaha burned to avenge his death. When Stewart arrived in the "Elizabeth," Te Rauparaha hired the vessel to take him, on payment of 30 tons of flax, to Akaroa, which was inhabited by natives of the same tribe as those who had slain his father. The local chief and his friends visited the vessel on Stewart's assurance that he had no hostile Maoris on board, Te Rauparaha and his men concealing themselves in the hold. Then a scene of frightful carnage ensued. The chief and his "rangatiras" were seized, the men warriors and common people butchered, while the remainder were reserved for a worse fate. Te Rauparaha and his followers, flushed with success, landed and fired the village, murdering all they could lay hands upon. Some of the bodies were taken on board and, with Stewart's acquiescence, cooked in the brig's coppers. On returning to Cook's Straits, Te

Rauparaha and his men landed, but Stewart retained the captive chief on board the "Elizabeth" until the 30 tons of flax were furnished. When this was received he handed over the chief and his wife, who were tortured to death. Stewart was afterwards arrested in Sydney and thrown into prison, but in spite of Governor Darling's efforts, the prosecution failed through lack of evidence.

It was to put down such ruffians as Stewart and his fellows that the missionaries used their influence with the Maori chiefs to induce them to apply to King William the Fourth for British protection; though it must not be thought that all New Zealand was one Kororareka, for the mission extended its influence, not only along the coasts, but in many districts of the interior, bringing a large minority of the natives into an outward adoption of Christianity.

Acting on the appeal of the "Confederated Chiefs of North Island," representations were forwarded to the Imperial authorities from the Governor of New South Wales, suggesting the appointment of a British Resident, and, in 1832, Lord Ripon despatched Mr. James Busby, a civil engineer of New South Wales, who was then on a visit to England, to fill that position. H.M.S. "Imogene" was employed to carry him to his Residency, where he arrived on the 5th May, 1833, and stationed himself at Waitangi, in the Bay of Islands, a short distance from the Piahia Mission Station, under the official ægis of Sir Richard Bourke, Governor of New South Wales. Busby was paid a salary, and provided with £200 a year to distribute in presents to the native chiefs; but he had no real authority, and was not backed by any force. Instead of seeking to extend the dominion of the British Empire, as might be expected from a British Consul, Busby drew up a federal constitution for the Maori tribes, ambitiously designated "The Confederacy of the Thirteen Northern Chiefs," and asked the Colonial Office to abandon all British claims to New Zealand, and to recognise such "confederacy" as the sovereign power of the State; and, stranger still, the proposal was agreed to in London. In 1835 Mr. Busby suggested that the New Zealanders should have a national flag, enabling vessels built in the colony to possess freedom of trade in British ports; and the proposal being also approved, Captain Lambert, in H.M.S. "Alligator," was sent to the Bay of Islands with three patterns of flags for the chiefs to select from. The flag was chosen accordingly, and saluted as the standard of an independent country. Mr. Busby managed to get the chiefs to accept his constitution, and his national flag was ceremoniously run up; but the hoisting of this piece of bunting formed the first and last act in the federation of Maori tribes under parliamentary institutions. From the Bay of Islands H.M.S. "Alligator" proceeded to the west coast of the North Island to punish the Ngatiruani tribe, who had behaved with inhumanity to the crew of the barque "Harriett," in April, 1834, and who held captive Mrs. Guard, the wife of the Captain, with her children. On board the "Alligator" was a company of the 50th regiment. Mrs. Guard and her children

were released; two villages, crowded with a mixed assemblage of men, women, and children, were cannonaded; the habitations in two "pahs" and their accumulated store of provisions were burned, and the head of the principal chief, who had been slain, was cut off and kicked by the triumphant soldiers and marines as a football along the beach. Thus did the enlightened white emulate the brutalities of the uncivilised barbarian. In the year 1837 Governor Bourke recalled Busby, on the ground that his appointment to the consulship at Kororareka had not answered the expectations that had been formed.

In 1837 Captain Hobson was in Sydney in command of H.M.S. "Rattlesnake." A serious war was then raging among the native tribes at the Bay of Islands, and Sir Richard Bourke thought it his duty to request Captain Hobson to proceed thither and protect British interests, and to report on the condition of the country. In the report, which attracted considerable attention, Captain Hobson proposed that factories should be established after the manner of the early trading companies of the English and the Dutch. When making the recommendation he was probably not aware that the Sydney merchants had, in 1815, made a similar proposal to Governor Macquarie. He also recommended that a treaty should be made with the New Zealand chiefs for the recognition of the factories and for the protection of British subjects and property.

It was also in the year 1837 that the New Zealand Association was formed, Mr. Francis Baring being the chairman. Several of those gentlemen who were in the venture of 1825 to Hokianga, were on the Committee, as well as some of those who were active in colonising South Australia. At their head were John Lambton, Earl of Durham, and Edward Gibbon Wakefield. One of the most prominent members was Sir William Molesworth. The movement towards systematised colonisation had a certain disturbing effect upon the Colonial Office. The fact of the matter was, that the Colonial Office had been foolishly committed to the acknowledgment of the "Confederacy of the Thirteen Chiefs," and did not know precisely how to recover the lost ground. Lord Glenelg was willing to grant the Association a charter of colonisation under certain conditions, provided the consent of the chiefs could be obtained. One of these conditions was objected to by the promoters. Lord Glenelg insisted that a certain amount of capital should be subscribed, and a fixed proportion paid before the Association should assume any authority. Lord Durham said the Association would "neither run any pecuniary risk nor reap any pecuniary advantage," and so the negotiations came to an end. In June, 1838, Mr. Francis Baring obtained leave to bring in a Bill for founding a British Colony in New Zealand, and though the first reading was carried by seventy-four votes to twenty-three, it was thrown out on the second reading by a majority of sixty.

In the meantime the islands were being overrun by speculative "land-sharks,"—clever adventurers who, well surmising an impending

change in the condition of affairs in New Zealand, hastened to secure some claim, in many cases vague and shadowy enough, to huge estates all over the country. It is alleged that most of the so-called purchases of native lands were altogether fictitious, or else were imperfect and made for absurdly low prices. By the year 1840 it was estimated that some 20,000,000 acres, or nearly a third of the islands, were supposed to have been "acquired" by the "land sharks." The claims arising out of these dubious transactions brought in due course a plentiful crop of confusion, bitterness, and heart-burning. There was at the time no legally constituted authority to deal with such cases, and armed conflict between the Maori warrior chiefs and the sharpers scheming to possess the estates of the tribes was rapidly becoming imminent. Annexation by Great Britain was the only solution of the difficulty; and it is to the credit of Marsden and his assistant, the Rev. Henry Williams, that they had both come to see this clearly. Moreover, there were rumours of no very pleasant character that the French had designs upon the islands. The missionaries were now on the horns of a dilemma. They had done their utmost to set up a native nation, independent of Great Britain. With a few exceptions they dreaded annexation; but they dreaded annexation by the French most of all.

The burlesque attempt of the quaint adventurer De Thierry to create a kingdom of his own in the North Island was also a factor in precipitating events. This amusing gentleman had endeavoured to enlist the sympathies of his countrymen and his Government, though apparently with small success. His efforts in this direction, however, served to attract French attention to New Zealand as a desirable possession; so when another knight of fortune, also French, by name Langlois, the captain of a whaling ship, appealed to his countrymen to aid him in exploiting the islands, there was a respectable measure of response. Langlois professed to have bought 300,000 acres of land from the natives of the Banks Peninsula, in the South Island. Owing in part to the exertions of this adventurer, a French syndicate, called "The Nantes-Bordelaise Company," was formed to found a French settlement on the shores of the beautiful inlet of Akaroa Harbour, on the island which Langlois declared he had purchased; and in this colonising association one of the shareholders was Louis Philippe. The formation of the French company, as well as the antics of Baron De Thierry, caused no little uneasiness, and all sorts of vague surmises, as to the nature of the intentions of France.

Some time in the year 1838, a public meeting had been held at Kororareka to consider the best means of preserving life and property in the district, and the Kororareka Association was formed for this purpose. When the news of the proceedings at the township capital of the Bay of Islands reached Great Britain, the Colonial Office awoke to the seriousness of the situation, and saw that further delay might prove fatal to British interests in the islands, and the annexation of New Zealand to the Empire was determined upon. Still the pro-

ceedings were of the tardiest. In December, 1838, it was proposed that a British Consul should be appointed to reside in New Zealand, and Sir George Gipps, the Governor of New South Wales, was officially informed of the intention ; but it was not until the middle of the next year that the selection of a consular agent was made, and it was determined that "certain parts of the islands of New Zealand should be added to the Colony of New South Wales as a dependency of that Government, and that Captain Hobson, R.N., should proceed thither as British Consul to fill the office of Lieutenant Governor." In June and July the arrangements were gazetted ; in August Lord Normanby gave the Consul his instructions ; and that official at once prepared to proceed with his family in H.M.S. "Druid" to Port Jackson, where he arrived on the Christmas Eve of 1839.

Captain Hobson's instructions were to establish a form of civil government with the consent of the natives ; to treat for the recognition of Her Majesty's authority over the whole or any portion of the islands ; to induce the chiefs to contract that no lands should in future be sold except to the Crown ; to announce by proclamation that no titles to lands acquired from the natives or the dependency would be recognised except such as were confirmed by a Crown grant ; to arrange for the appointment of a commission to determine what lands held by British subjects had been lawfully acquired ; and to appoint a protector to supervise the interests of the Maori population. Captain Hobson was armed with a dormant commission, authorising him, after annexing New Zealand, to govern it in the name of the Queen. In Sydney a Royal Proclamation was issued, under which New Zealand was included within the political boundary of the Colony of New South Wales. Captain Hobson was to act as Lieutenant-Governor, with the Governor of New South Wales as his superior officer. In H.M.S. "Herald" he left Sydney for the Bay of Islands where he arrived on January 29th, 1840, "and was loyally received by the Alsatians." The history of New Zealand, as a portion of the British Empire, dates from that day.

Captain Hobson was accompanied by a Treasurer, a Collector of Customs, a Police Magistrate, two clerks, a sergeant, and four men of the mounted police of New South Wales. As soon as the "Herald" left Port Jackson Sir George Gipps issued three proclamations, the first, already referred to, extending his government to any territory which had been or might be acquired in sovereignty by Her Majesty within the group of islands in the Pacific Ocean commonly called New Zealand ; the second, appointing Captain Hobson Lieutenant Governor of any territory that might be acquired by Her Majesty ; and the third declaring that Her Majesty would not acknowledge as valid any title to land which either had been or should be thereafter acquired in that country, which was not either derived from or confirmed by a grant made in Her Majesty's name or on her behalf. To the land claimants of Sydney the latter proclamation was especially

obnoxious, as the traders there had bought large tracts for speculative purposes. In this connection commissioners were subsequently appointed to revise claims put forward by some individuals to large tracts of land purchased in the islands. A Bill was introduced into the New South Wales Parliament during the session of 1840 for the purpose, when Mr. W. C. Wentworth and Mr. James Busby, late Consul at the Bay of Islands, and some others who had purchased land from several New Zealand chiefs, resisted the inquiry. These persons had purchased land to the amount of 10,000,000 acres in the South Island, and 200,000 acres in the North Island, for which they had paid a small sum in cash, and agreed to the further payment of £100 per annum for life to each of the chiefs that had ceded his territory. The claimants were heard at the Bar of the Legislative Council, both personally and by counsel, in defence of their claims, and in opposition to the Bill. Messrs. Wentworth and Busby were heard personally, the others through their counsel, Mr. W. a'Beckett (afterwards Chief Justice of Victoria) and Mr. Darvall. The principles upon which the Bill was framed and advocated were :—First, that the savages possessed no other right in the country they inhabited than that of mere occupation until they became civilised enough to put it to some proper use—that of cultivation ; consequently they were incapable of giving legal title of land to any other person ; second, that if a country inhabited by men of this description were afterwards taken possession of by any civilised colonising power, the right of pre-emption existed only in that power ; that British subjects, either as individuals or as bodies, possessed no right to form colonies without the consent of the Crown, and that, in the event of their doing so, they became liable to be ousted by the Crown from their possessions. The Bill was passed, and after the Act became law a number of the claimants, comprising subjects of Great Britain, France, and the United States, resident in New Zealand, protested against the enforcement of the measure, and appealed to their respective Governments against the right of the Governor and Council of New South Wales to enact and enforce such a regulation. The Commission, however, was appointed and assumed the title of a Court of Claims, and its decisions, in most instances, were to the effect that the land to which the claimants were entitled was a mere fraction of the quantity said to be purchased, and some claims were disallowed altogether. The occasion of the introduction of this Bill into the Legislative Council of New South Wales was that in the course of the preceding year it was announced to the colony that a Treasury minute had been made sanctioning an advance from the revenue of New South Wales for the expense of the Government of New Zealand as a dependency of the mother colony with a Lieutenant-Governor, the funds so advanced to be repaid out of the revenue received from the territories ceded from time to time by the native proprietors in accordance with the ordinances of the Governor and Council of the older colony for that purpose enacted.

The persons in England interested in New Zealand colonisation were by no means content to put up with failure to obtain parliamentary sanction to their enterprise as already narrated. After the collapse of the Association in 1837, Edward Gibbon Wakefield had journeyed to Canada with Lord Durham, and returning with his chief to England he immediately formed a New Zealand Land Company, of which Lord Durham was Governor, and Mr. Joseph Somes Deputy Governor. The first paragraph in the prospectus of the Company declared its character, and showed that it was not open to the objection made to the Association. It said:—"This Company has been formed for the purpose of employing capital in the purchase and re-sale of lands in New Zealand, and the promotion of emigration to that country." The capital was £400,000 in 4,000 shares of £100 each, with a deposit of £10 per share. Rusden remarks, in his history of New Zealand, that "a capital of £100,000 was paid up, and 100,000 acres of land in New Zealand had been sold before a title to one had been acquired. They (the shareholders who paid money) drew lots for sections unknown of lands which the Company was about to seek."

A preliminary expedition was prepared to sail in April, 1839, in the "Tory," a vessel of 400 tons burthen, with the first body of the Company's emigrants, and letters of introduction to Governors of Colonies were solicited at the Colonial Office. The answer was that the Queen would be advised to take measures to obtain by cession the sovereignty of the islands, and that no pledge could be given for the future recognition on the part of the Crown of any titles to land which the Company might obtain by grant, or by purchase from the natives. Nothing daunted, however, by this rebuff, the "Tory" put to sea on the 12th May, under Colonel William Wakefield, of the Spanish Legion, since, after repeated efforts to obtain the help and sanction of the British Government, the Company had decided to go unauthorised. The destination of the expedition was the southern end of North Island. Two days after the departure of the "Tory" the Company's directors announced to the Government that the Association had been re-formed, and Lord Normanby was told that preparations for a very extensive emigration were in progress in various parts of England and Scotland.

The "Tory," which carried an exploring staff, and a cargo of trade for barter with the Maori chiefs, arrived at Queen Charlotte Sound on the 16th August after a rapid passage, for that time, of ninety-six days. Wakefield spent some time in Cook's Strait on land-purchasing expeditions, and carried on a series of negotiations with the Maori chiefs, which led to extensive purchases of territory. On the last day of September, 1839, he took formal possession of Port Nicholson in the name of the company, and the New Zealand flag was hoisted and duly saluted. Colonel Wakefield reported to the Company that he had purchased a territory of many millions of acres, as large in area as Ireland, extending from 38° to 43° south latitude on the west coast, and from 43° to 44° south latitude on the east coast—in short, nearly the whole of what are

now the provincial districts of Wellington and Taranaki; that portion of Canterbury which includes Akaroa; and a large slice of Nelson—in exchange for goods valued at something less than £9,000. His purchase embraced localities where the Company's settlements of Wellington, Nelson, and New Plymouth were subsequently formed. It is probable that Colonel Wakefield believed in the validity of his transactions with the Maori chiefs; but it is certain that the latter, for their part, never had the least notion of selling the greater portion of this immense area, though it is equally probable that such chiefs as Te Rauparaha and Rangihaeata, who were parties to the bargains, knew that Wakefield thought that he was buying the country. Fifty-eight chiefs in all signed the deeds of sale. Moreover, it has been pointed out that even if the Maori chiefs who were concerned in the transaction understood what they were doing, they had no right, under native law and custom, thus to alienate the heritage of their tribes. Had Colonel Wakefield's alleged purchases been upheld by the British authorities, the Company would have become master of nine-tenths of the lands of no fewer than ten powerful tribes. The truth of the matter is that the interpreter of the Company was one Barrett, who had lived many years in Cook's Strait, sealing and whaling, and who had "picked up" sufficient "pigeon" Maori to make himself understood with reference to the simple needs of a very primitive state of existence, but who was utterly unable to translate complex sentences of legal terms employed in acts of title and conveyance into the New Zealand tongue, which frequently requires the employment of words having several meanings. The deeds of sale were written in English, and their true meaning Barrett was absolutely unable to render into Maori, even if he understood it himself. However, after despatching the "Tory," the directors in England, prematurely presuming on the success of their agent, actually proceeded, as we have seen, to sell land to the value of more than £100,000, and to send out emigrants before they knew that a single acre had been assigned. Towards the end of 1839 the Company's preparations were complete, and the first consignment of its settlers was shipped to Port Nicholson, on the shores of which, on January 22nd, 1840, the town of Wellington was laid out.

But other folk were as busily engaged in colonising schemes as Wakefield and his *confrères* were. Langlois, the French whaler, and the "Nantes-Bordelaise" Company gradually brought their plans to completion. In October, 1839, a vessel named the "Comte de Paris," having on board a number of emigrants, left France for New Zealand, and the French frigate "L'Aube" sailed for the same shores simultaneously. They were, however, destined to arrive at the land of promise just late enough to miss its acquisition by a hair's-breadth.

The Company's first settlement, Wellington, was founded on the 22nd January, 1840. Captain Hobson, R.N., afterwards the first Lieutenant-Governor, landed on the 29th of the same month, empowered, with the consent of the natives, to proclaim the sovereignty of the

Queen over the islands of New Zealand, and to assume the Government thereof. Immediately after his arrival, he issued an invitation to all British subjects to meet him at the church at Kororareka the next day, where he read two commissions, one extending the limits of New South Wales, and the second appointing him Lieutenant-Governor over such portions of New Zealand as might thereafter be added to Her Majesty's dominions. Two proclamations were also read, the first announcing that Her Majesty's authority had been asserted over British subjects in New Zealand; and the second that Her Majesty did not deem it expedient to acknowledge as valid any titles to land in New Zealand which were not derived from or confirmed by the Crown. Notices in the native language had been circulated on the Friday previous, stating that Captain Hobson would, on February 5th, hold a meeting of the chiefs for the purpose of explaining to them the Royal Instructions he had received, and of placing before them a copy of a treaty he would submit for their adoption. On February 5th and 6th the chiefs consulted approved of the treaty of Waitangi, or "Water of Weeping," as it is called on account of the proximity of the falls. Tents and a platform were erected at Waitangi, and the northern chiefs were invited to meet and confer with the Queen's representative. Much to the annoyance of the persons promoting the treaty, Bishop Pompallier appeared in full canonicals to oppose the new departure, and this was looked upon as a signal instance of French machiavellianism and designing subtlety. On the other side, Henry Williams, the ablest of Marsden's lieutenants, threw all his weight into the scale, and acted as translator. Waka Nene, a Ngapuhi chief, ably supported him. A strong minority of the Maoris was emphatically hostile. The officials looked on anxiously. Then it was that Waka Nene, the most influential man of his tribe, threw his "mana" on the side of the Government, and spoke strongly and eloquently for annexation. His speech gained the day, and a treaty was drawn up and signed. By the preamble, Queen Victoria invited the confederated and independent chiefs of New Zealand to concur in the three articles of the Treaty on which was based the title of the Crown to the North Island. It may be thus condensed:—The Queen of England, in regard for the Maori people, desiring to preserve for them their rights as chiefs and the possession of their lands, and also having heard that many of her subjects had settled in New Zealand, and that more were about to follow, to prevent troubles arising between the two races, had thought it right to send William Hobson, a captain in the Royal Navy, to be Governor for all parts of New Zealand then or thereafter ceded to her; to effect which object the following articles of agreement were proposed:—

i. The chiefs of New Zealand cede to the Queen for ever the right of government over the whole of New Zealand.

ii. Her Majesty the Queen of England confirms and guarantees to the chiefs and tribes of New Zealand, and to the respective

families and individuals thereof, the full, exclusive, and undisturbed possession of their land and estates, forests and fisheries, and other properties which they may collectively and individually possess, so long as it is their wish and desire to retain the same in their possession; but the chiefs of the united tribes, and the individual chiefs, yield to Her Majesty the exclusive right of pre-emption over such lands as the proprietors may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and persons appointed by Her Majesty to treat with them on her behalf.

iii. In consideration for consent to the Queen's Government, the Queen will protect all the Maori people and give them all the rights and privileges of British subjects.

Under this treaty the natives not merely ceded to the Queen the right to purchase such land as the owners were willing to sell, but they ceded also the "pre-emptive right of selection over all lands"; and the practical interpretation put upon this, and rightly so, by each of the Governors, with the exception of the incompetent Fitzroy, was that the Queen might have the refusal of all lands the natives were willing to sell, and that if the refusal were given no one else should be allowed to buy; in other words, the treaty of Waitangi made the Government sole trader in all native lands sold directly by the Maori tribes, and absolute intermediary between Maori owners and white purchasers. This developed into one of the chief grievances that culminated in the Maori disaffection of the future.

Nearly fifty chiefs signed the treaty on the spot, and within six months, the list of signatures had swollen to 512. This phenomenal subscription was due to the energetic canvass throughout the tribal territories made both by the missionaries and by the Government. Only one chief of first-class rank and standing refused to sign, so that it may fairly be claimed that the Maori race accepted the treaty of Waitangi. The natives were wise in their day and generation, and the white New Zealanders assert that down to the present time they regard the treaty as the "Magna Charta" of their liberties. This State document was of the utmost importance to them. It made the Queen the supreme authority, and guaranteed full possession to the Maoris of their tribal lands; in short, they were thereby recognised, by the power of which they were a kind of feudatory lords, as owners in fee simple of the whole of the islands. One of the ancient lords of the soil subsequently put the Maori sentiment respecting the treaty into these words: "The shadow passes to the Queen, the substance stays with us."

Simultaneously with the drawing up of the treaty of Waitangi, Governor Hobson announced by proclamation to the white settlers that the Crown would not recognise validity of any titles to land not given under the authority and sanction of the Queen. It is difficult to see what other course the Governor could have taken, but at the same time his treaty and his proclamation were bound to paralyse settlement,

to exasperate the entire white population, and plunge the infant Colony into a sea of troubles. Outside the official class, everyone was uneasy and alarmed. All the settlers were either land-owners, land claimants, or would-be land purchasers. Yet they found themselves at one and the same time left without titles to all they possessed, and debarred from the right of buying anything more except from the Crown. The Maoris were a warlike race, and had to be treated with consideration, though—as Mr. Reeves points out—"as a rule civilised nations do not recognise the right of scattered handfuls of barbarians to the ownership of immense tracts of soil, only a fraction of which they cultivate for use." However, partly from policy and partly from missionary zeal, 70,000 Maoris, or thereabout, were given a title, guaranteed by the British Crown, to some 66,000,000 acres of valuable land, and the germ was sown of a plentiful crop of troubles. Yet, after all, it was "Waitangi or nothing." Without such a guarantee as that given under the treaty, the missionaries could never have persuaded the Maori chiefs to yield up their recognised sovereignty, and the islands might easily have become a prey of the first power to whom Maori chieftain sovereignty was no recognised entity. Of course, it is now seen plainly enough that it would have been only just and statesmanlike if the recognition of native ownership had been accompanied by a vigorous policy of land purchase by the Government. But this was impossible. Captain Hobson was sparsely equipped; he received only £60,000 in three years, and did not himself appear to apprehend any pressing necessity for acquiring from the Maoris a sufficiency of land to meet the needs of the settlers.

On May 21st, 1840, British sovereignty was proclaimed over the islands of New Zealand; and not a moment too soon. Captain Hobson had hardly arranged his quarters when a French corvette came into the Bay of Islands to take possession. Finding the British flag planted in the North Island, the French commander determined to try for the South Island and hoist the tricolor at Akaroa. His design was, however, frustrated. When Governor Hobson (who, whatever may have been his shortcomings as a civil administrator, was an able and quick-witted naval officer) learnt of the kindly intentions of the "Aube" towards the southern half of his vice-royalty, he hurried off the British sloop-of-war "Britomart" to Akaroa, in the Banks Peninsula. The French man-o'-war had become separated from her consort, the emigrant ship, "Comte de Paris," and the British sloop managed to dash into the haven of Akaroa first, but by so little that she was engaged in saluting the British ensign only just as the "Aube" sailed into the harbour. The French commander then abandoned the design of seizing New Zealand as a French possession, and the "Comte de Paris" arriving in port, he landed the nucleus of his pioneer colony as a friendly French settlement under the British Crown. This tiny colony of men and women of French birth remained at Akaroa many years, and numbered at one time some 200

settlers. Most of them have since removed to other French colonies in the Pacific, but during their stay at Akaroa they gave a distinctive character to the culture of the soil, and the neighbourhood is still famous for its production of fine varieties of plum, pear, and peach.

New Zealand was now a British possession and a dependency of New South Wales, and its infant troubles speedily began to put in obnoxious appearance. The white population of New Zealand was composed of antagonistic sections, all vehemently opposed. As we have seen, the missionaries joined forces with the Government; but there were the old "Pakehas," or denationalised whites; the lawless Alsatian skippers, traders, whalers and sealers; and the embittered land claimants, new settlers, and speculative "land-sharks" also to be reckoned with. Added to these, there was the highly respectable and influential New Zealand Land Company, with Lord Durham and Edward Gibbon Wakefield at its head. While the Governor was arranging the details of British supremacy, the directors in London, with an energy quite unchecked by any knowledge of the real condition of the country, kept on sending out ship-load after ship-load of emigrants to the districts around Cook's Strait. When the proclamations declaring the sovereignty of the Queen were made public, more than a thousand passengers had been landed from the Company's vessels in Port Nicholson. These new arrivals had "formed themselves into a Government, elected a Council, appointed Colonel Wakefield President, and had proceeded to enact laws and appoint magistrates." Although the centre of operations was at Wellington, bodies of the Company's settlers were also planted at Wanganui and New Plymouth on the west coast of the North Island, and at Nelson in the South Island. Lord John Russell was in power, and seems to have viewed the Company as a body which might be made nationally useful in promoting a wholesome emigration from the mother country, and in turning to account the barren lands and wastes of the noble colony the Empire had just acquired. Moreover, the merchants and bankers of London continued to urge the Government in the Company's favour. The association received a Royal Charter of Incorporation, and became a joint body with a capital of £300,000, while in consideration of its surrendering every pretension of right or title to all lands acquired under Colonel Wakefield's negotiations with the natives, the Crown agreed to make over to it 700,000 acres of such lands for the purpose of colonisation. These arrangements were made in England. Meanwhile, as soon as Governor Hobson heard of the proceedings at Port Nicholson, "without one hour's delay," he issued a proclamation refusing recognition of the Company's land purchases, and sent thirty men of the 8th Regiment, who had been drafted from New South Wales, and Lieutenant Smart with five of the mounted police of that colony, under the command of Lieutenant Willoughby Shortland, R.N., with soldiers and marines, to put down all acts of insubordination, and to publish a proclamation declaring the provisional government of the Company

illegal and usurping, and calling upon all persons, upon their allegiance to the Queen, to withdraw therefrom, and to "submit to the authorities in New Zealand legally appointed." The settlers informed Lieutenant Shortland that they had formed themselves into a Council only until the Governor was enabled to act. There was a good deal of soreness felt as to the treatment meted out to them; nevertheless, the settlers drew up an address of congratulation, which Colonel Wakefield carried to the Bay of Islands and presented to the Governor.

Under the second article of the Treaty of Waitangi, the Maoris are assured of all their territorial possessions, except such lands as they might dispose of to the Crown. It is a question of equity, however, as to how far this article should have been made retrospective. Many of the settlers in New Zealand were not "land-sharks." They had purchased their holdings in all good faith, and had held them for some years; and this was especially the case in regard to the purchases of the New Zealand Company, which had the quasi-approval of the British Government, and which had introduced hundreds of defenceless settlers of an admirable type to the colony. Whatever opinion may be entertained concerning this question, the fact remains that the Governor assumed the illegality of the Company's title to the waste lands in Cook's Strait, where it had planted its little settlements, and called on the Company to prove its title good, as against the natives, before a legal tribunal specially constituted for the purpose. Governor Hobson was stricken with paralysis during the height of the important business attending annexation. Upon his partial recovery he pursued his inquiries as to the best site for the seat of government, and finally determined to select Auckland, for various reasons, as set forth to the Secretary of State, viz., on account of its central position, the great facility of internal water communication, the facility and safety of its port, and, finally, the fertility of its soil, which was stated by persons capable of appreciating it, the Governor said, to be exceptionally well-adapted for every agricultural purpose. Previously, however, to his fixing the site, he had been assured, in the address presented to him by the inhabitants of Port Nicholson, that they had anticipated as far as possible the wants of the Government, and set apart the most valuable sections of land for the convenience of the public offices and the personal accommodation of His Excellency, feeling assured that, sooner or later, Wellington would become the metropolis and the seat of Government—a prophecy which has had complete fulfilment in fact.

There is no doubt that the refusal of the Government to make Wellington the capital greatly exasperated the Company's settlers at Port Nicholson; but other sources of friction were not far to seek. It was the Governor's duty to report to Sir George Gipps that the title of the Company to Port Nicholson itself was disputed by the natives, and thus to manifest to the latter his determination honourably to fulfil the conditions of the treaty which, on behalf of the Crown, he had concluded with them. There is no doubt, however, that things were

allowed to drift from bad to worse, instead of meeting with prompt settlement. The Government should have dealt at once with each land question between Maori and Company as it arose. Instead of such a course of procedure, a Commissioner was appointed, who did not arrive until months after the Governor, and his final award was not given for years.

The condition of the country was troubled in the extreme. Colonel Wakefield had purchased the land around Port Nicholson from two tribes, known as the Ngatirankawa and the Ngatiawa. These quarrelled among themselves over the goods paid as the price of the territory, and the former treacherously attacked the latter, severely beating them, with a loss of twenty-seven warriors. There were also endless disputes between the settlers and the Maoris concerning the site of the colony at Port Nicholson. It had, in the first place, been foolishly pitched on a spot in the inner harbour upon which blew all the winds from the sea, its bleak situation rendering it the reverse of habitable. A more sheltered site was found, and the settlement removed to it; and then began the miserable bickerings, which culminated in outrage and pillage in later time. The Maoris denied absolutely the white man's title to the second location, but the settlers resolutely retained their hold upon this land, now known as Wellington, and New Zealand's metropolis. Native title was, moreover, a curious and complex affair. The New Zealanders were twenty independent, hostile tribes, who had waged furious wars with each other for centuries; who had chased each other from "pa" to "pa," now advancing conquerors, now retreating fugitives. Their title rights to their lands were derived or lost through conquest, through re-conquest, through occupancy, through non-occupancy, through slavery, and through accidental spilling of blood. British recognition of the Maori right to the fee simple of the lands of New Zealand instantly revived among the tribes the bitter memories of those title-giving ferocities which had all but extinguished their race. However, to adjudicate in matters affecting native titles, and all disputes arising therefrom, a tribunal was instituted, called "The New Zealand Land Claims Court," and an able and independent lawyer, Mr. Commissioner Spain was appointed to preside, to hear evidence, and to decide in all cases affecting the legality of the Company's purchases in Cook's Strait. His was a task of vast magnitude. Three-fourths of the witnesses would be excited savages, giving contradictory evidence in an unknown tongue; and when the learned Commissioner had struggled through the maze and pronounced judgment, it was infinitely less probable that the pack of disputants would bow to his decision than that they would proceed to tomahawk each other before his face, and practically renew in Court those slumbering ferocities which the Court's inquiries had aroused. A great deal of angry feeling was evoked by the Governor's well-meant but futile attempts to deal out even-handed justice to all alike, and the Press, both in Wellington and in England, under the influence of the Company, misrepresented

much that the Governor did, impugning his motives and assailing his administration.

On receipt of Captain Hobson's despatch detailing his acts and proceedings since his arrival in the Colony, Lord John Russell gave his "entire approbation" to all and sundry that had been done, and stated that he would soon transmit Letters Patent, constituting New Zealand a separate Government, with a commission appointing Captain Hobson the first Governor. A charter for establishing in the Colony of New Zealand a Legislative and Executive Council, and for granting certain powers and authority to the Governor, was signed by the Queen on the 16th November, 1840, and published in the Colony on the 3rd May, 1841. The Letters Patent described the new Colony as consisting of the group of islands lying between 34° 30′ and 47° 10′ south latitude, and 166° 5′ and 179° east longitude; and declared that the three principal islands, known as the Northern, Middle, and Stewart's Islands, should in future be designated as New Ulster, New Munster, and New Leinster.

In the year 1837 the New Zealand Association pointed out the pressing necessity of a bishop for the colony, and the idea engaged the attention of the New Zealand Land Company; but early in 1841 the proposal was adopted on a regular basis by the Established Church of England, and a Colonial Bishoprics' Council was formed. The Rev. George Augustus Selwyn, curate of Windsor, was chosen for the position. He sailed by way of Sydney about the end of the year 1841, landed at Auckland, the seat of his diocese on the 29th May, 1842, and soon proved an important influence in the affairs of the young colony.

Governor Hobson died at Auckland on the 10th September, 1842, from a paralytic seizure, at the age of forty-nine years, and after ruling New Zealand for a little less than three years.

In the interval between Hobson's death and his successor's arrival, Lieutenant Shortland assumed the duties of Governor, and continued acting until December, 1843, when Captain Fitzroy, of "Beagle" fame, came to the colony to act as the representative of Her Majesty. Acting-Governor Shortland, who had previously officiated as Colonial Secretary, was not a success. He ruled by proclamation, with the aid of laws already enacted, and avoided calling the Legislative Council together.

The unfortunate Wairau massacre, which occurred during Shortland's term of administration, had a marked effect in checking immigration to the colony. In consequence of attempting to enforce a claim to the possession of certain lands supposed to have been legally acquired, Captain Arthur Wakefield and between twenty and thirty of his followers were killed by the Maoris. The incident did incalculable harm to the British "mana" or prestige, and the ill-advised action of Captain Fitzroy, in neglecting to avenge the massacre, tended to still

further deepen the contempt with which the Maoris regarded British suzerainty.

Immediately on his arrival in New Zealand, Captain Fitzroy embarked on an ocean of blunders. He seems to have at all times acted in a most injudicious manner—so much so, indeed, that his administration has been described as "The Valley of Humiliation." He publicly rebuked the magistrates who had signed the warrants for the arrest of Te Rauparaha and Rangihaeata, the prime movers in the Wairau massacre. Several of the magistrates thereupon resigned, while the exasperated settlers declared that the Governor could not be master of his actions. Captain Fitzroy then visited the chiefs at Waikanae and held a conference with them, the bloodthirsty Te Rauparaha being treated with especial consideration. After hearing the Maori version of the Wairau incident, the Governor informed them that he had decided that Wakefield's party were at fault, since they had no proper title to the lands claimed, and Commissioner Spain had not decided on the ownership. The Maoris were overwhelmed with surprise at this decision, and openly jeered at their complaisant judge, while the virtue of the British "mana" grew dimmer than ever. Commissioner Spain, who had come to the Colony in 1841 to preside at a sort of Land Court, was so disgusted with the Governor's dispensation of justice that he virtually resigned his office, and soon after re-emigrated to Australia.

There were at this time seven coastal centres of settlement, viz., the old Alsatian whaling, sealing and trading depôt at the Bay of Islands, Kororareka, lawless and missionary; Waitemate (Auckland) on the Hauraki Gulf, official and missionary; Wellington, on Port Nicholson, the head-quarters of the New Zealand Land Company; Nelson, the second establishment of the Company, at Blind Bay, on the North coast of the South Island; little Akaroa, on Banks Peninsula, in the South Island, a tiny colony planted by French immigrants; Wanganui, another off-shoot of the Company on the west coast of the North Island; and New Plymouth, the chief centre of the Taranaki Peninsula, also on the west coast of the North Island. The pioneers of Taranaki were sent out by the New Plymouth Company, a colonising society which had been formed in England, and had bought 50,000 acres of land from the New Zealand Company. Governor Fitzroy's blunder over the land grants of Taranaki was to prove a plentiful source of future trouble and bloodshed. The New Zealand Company's agents averred that they had purchased from the Maoris the whole of the Taranaki Peninsula, besides other large areas—some 20,000,000 acres—a territory, in fact, as large as Ireland. Mr. Commissioner Spain insisted that the Company should, like other claimants, prove that the signatories of the deeds of sale "had a right" to convey the lands for sale. In England and New Zealand the Commissioner's method of procedure was vigorously opposed by the Company. Colonel Wakefield submitted to the Court six purchase deeds—those of Port Nicholson, Nelson, Taranaki, Wanganui, Porirua and Manawatu—for

which he sought to obtain Crown grants. Before taking evidence in the case as to ownership of the contended territory, Commissioner Spain informed Colonel Wakefield that to ask the Government for a Crown grant of land, whether the native title was extinct or not, was, under the treaty of Waitangi, *ultra vires:* in other words, it was asking the Crown to do that which was utterly beyond its powers to perform, as it could not grant that which it did not possess. After many sittings of the Court, the Commissioner reported that the New Zealand Land Company's agents had bought 282,000 acres—71,900 in the Wellington District, 151,000 in the Nelson, and 60,000 at New Plymouth. In the last-mentioned district (Taranaki) the Company claimed the entire territory. The Commissioner's award cut its claim down to 60,000 acres. But even this was now disputed, and Captain Fitzroy refused to ratify the Crown official's report, limiting the area he thought the Company had correctly purchased to 3,506 acres. This decision, which Fitzroy had power under the law to give, created much discontent and irritation among the settlers, who had been induced to leave prosperous homes under a stable Government to adventure their lives and their fortunes in a distant dependency of the Empire.

The case will appear to have been especially hard, on a calm consideration of the manner in which the lands of Taranaki had been purchased. They had been bought from the Waikatos, who had acquired them by conquest, carrying away the original owners into slavery; but the Waikatos had never taken possession of the soil by genuine occupation. When Colonel Wakefield bought them they were altogether vacant. By-and-bye the original owners of these lands, the men of the Taranaki tribe who had been conquered and made bondsmen by the Waikatos, were manumitted through missionary influence with their enslavers, and returned to their tribal heritage, the ownership of which they proceeded to contest with the Company. The Governor regarded the question with hypersensitive delicacy, and decided, as we have seen, that the enlarged and returned bondsmen were the true owners of the soil. He handed the bulk of the disputed territory back to the manumitted tribesmen, penned up the Company's settlers on a paltry strip of country, and temporarily ruined the settlement in Taranaki. By his act he also encouraged the Maoris to be more aggressive and grasping in their demands, gave a severe check to immigration, and dropped a smouldering ember of resentment and racial hatred which was destined to break forth in a devouring flame of violence and bloodshed and devastate the entire province. One immediate effect of Fitzroy's ill-advised action in the Taranaki matter was the utter paralysis which seized on all attempts at cultivation. Many colonists abandoned New Zealand, and those who remained feared that they might be driven any day from the country. They hoarded the remnants of their little means, and kept themselves in readiness to re-emigrate to Australia, South America, or some island of the South Pacific. It is thought that at this period nothing but the knowledge that they might proceed too far—

that they might disgust the white man so that he might go away, never to come back save as a conqueror, and thus deprive them of the trade they had learned to prize, with the accompanying luxuries they had learned to lust for—prevented the Maoris from utterly destroying every vestige of European occupation in the islands, and sweeping away every one of the young settlements from the face of the land.

After destroying the Company, Captain Fitzroy set to work to destroy the Crown. In the Waitangi Treaty there was a clause claiming for the Queen exclusive right of purchase of native lands. The Maori Chiefs demanded that this clause should be rescinded. Governor Fitzroy assented, and the "land-shark" and the speculator were once more free to exploit the soil of the country at their own sweet will. By proclamation, the Governor annulled the one clause of the Treaty which had been passed in the interests of colonisation, and permitted private persons to buy land direct from the tribes on payment to the Government of 10s. an acre royalty on the quantity purchased. The natives had discussed the Treaty before signing it, and had come to the conclusion that while the shadow of authority passed to the Queen, the substance of the land remained with them. It might now appear to some acute Maori that the Government wanted the substance as well as the shadow, for the wily buyer declared that he could afford no more than a bare pittance as purchase money, since the authorities received half-a-sovereign for every acre sold. It is not to be wondered at that only 1,795 acres were acquired by the whites under this condition. The royalty being strenuously opposed by both parties alike, the Governor rushed to the other extreme, and reduced the land-sale tax to a penny an acre. Under the altered law, 90,000 acres were acquired by speculators and others, much of which was in the immediate neighbourhood of Auckland, and should have been bought direct by Government for future public benefit. The truth was, that Fitzroy had no money, and knew not what to do to raise revenue. His desperate efforts at finance were a lamentable series of appalling blunders. His inefficient treasury was largely replenished from Customs duties; but whalers and timber vessels did not resort to the Bay of Islands as they did in the old lawless days of this ocean Alsatia, and trade had greatly fallen off. Both Europeans and Maoris were deeply incensed, and things were rapidly getting worse instead of better. In May, 1844, the Governor sanctioned an ordinance to issue debentures, and make them a legal tender. This expedient of issuing paper money was contrary to Royal Instructions, and the Governor had no right to resort to such a course. His ordinance was disallowed. In June of the same year he amended the ordinance of 1841, levying Customs dues, and imposing a duty of 30 per cent. on guns, gunpowder, and weapons of any description, or "any munition of war." Trade became paralysed, and the Governor, at his last extremity, in order to conciliate the Europeans and Maoris of Kororareka, passed an ordinance in September, 1844, repealing all Customs duties at that port. Loud was the

jubilation at the Bay of Islands, but louder still were the groans from every other part of the Colony. A cry at once went up from east and west, from north and south, for a similar concession. In an attempt to please everybody the Governor thereupon abolished all Customs duties everywhere within his little realm; though fully nine-tenths of the whole public revenue of the Colony was derived from them. But revenue had to be obtained. There must be a compensating land tax, a tax on stock, and a tax on the number of rooms in dwellings. But the colonists declared, and quite truly, that they possessed no property. A considerable portion of their property in Cook's Strait had been literally destroyed by the Governor's own policy. They pleaded "no effects," and Customs duties had soon to be resorted to again. This was done by a new law, made in April, 1845, which repealed the property tax and other imposts of the preceding year.

These sudden changes in the method of taxation particulary exasperated the Maoris stationed at and around the Bay of Islands, and resulted in the last and worst of the unhappy Governor's misfortunes and blunders—an unsuccessful war. The Maoris had formed a very poor opinion of the Governor, and in order to give him an idea of their power, they invited him to a great banquet given near Auckland, and danced a war-dance before their guest. Their deliberate intention was to terrify and overawe him; and in this they succeeded, for the Governor went away duly impressed.

The initial trouble which led to the first serious conflict between the British and the Maoris appears to have arisen through the amended ordinances which imposed the 30 per cent. duty on guns, gunpowder, or weapons of any description, or any "munition of war," enacted in June, 1844. The decline of Kororareka's trade was thereby accelerated. The seat of Government was no longer at the Bay of Islands. This was another cause of Maori discontent. The foreign demand for the staple products of timber, flax, and kauri-gum had fallen off to a very large extent. Money was scarce; tobacco, blankets, and ammunition were difficult to procure; the Government had little money wherewith to purchase native lands; and, worse still, the Maoris settled round the Bay of Islands noted with jealousy the increasing prosperity of their hereditary foes, the tribes of the Waikato, and the Ngatiwhatua, stationed in the vicinity of Auckland. This last fact, more than any other, incensed the warlike tribesmen of Ngapuhi, the nation whose relations with the British were older than those of any other Maori clan. Their disaffection came to a head in the person of Hone Heke, who, though not a chief of the first rank, had won himself a recognised position by his marriage with the daughter of the renowned Hongi—a position, moreover, which his courage and intellectual gifts helped him to maintain. One of Hone Heke's first acts of lawlessness was the hewing down of the flagstaff erected on the hill of Maiki, overlooking Kororareka; and he was prompted to this action by some foreign whites of the beach-comber type, who persuaded him that, with the removal of

this symbol of British influence, prosperity would return to the Bay of Islands and the chiefs of his race. On the morning of the 8th July, 1844, Hone Heke chopped down the flagstaff, and carried away the signal-balls to his "pa" at Kaikohe. This act of overt rebellion threw the people of Auckland into a state of abject terror. Fortunately, the Ngapuhi tribe at that time was divided in sentiment, and Tamati Waka Nene headed the section that stood by the Government. In response to an urgent request from Captain Fitzroy, a force of 160 men of the 99th Regiment, then stationed at Sydney, was sent over, and, accompanied by a detachment of thirty men of the 9th Regiment, proceeded to Kororareka. Meanwhile the Governor had ascertained that Hone Heke's great grievance was the imposition of the Customs' duties. He thereupon declared the Custom House closed, and Hone Heke then sent an apology for his conduct. Later on, at a conference with the chiefs, Hone Heke repeated his assurances of regret, and by way of fine was ordered to deliver up ten old muskets. Instead of retaining the muskets, in accordance with Maori custom, the Governor, with stupid magnanimity, returned them, and thereby gained the scorn of every true Maori in New Zealand. It was about this time that the Legislative Council, in order to allay native discontent, made a departure from the spirit of the Treaty of Waitangi by allowing the Maoris to sell their lands direct to the settlers.

The flagstaff had now been re-erected; but prosperity was slow in coming, for the whalers had not yet learnt of the repeal of the duties. Hone Heke considered that the entire abolition of the flagstaff, as the symbol of British authority, was needed to bring this about, and therefore, early in January, 1845, he again hewed it down. For a third time the post was erected and sheathed with iron, and great preparations were made to defend it. Meanwhile, Hone Heke summoned to his aid the powerful chief Kawiti and various other heads of the Ngapuhi tribe. Again the flagstaff was hewn down, and in the conflict the whites were worsted, several being killed, while the others took refuge on the vessels in the harbour. Soon afterwards Hone Heke's band destroyed nearly the whole of the settlement, and the British "mana" received a more serious blow even than the Wairau massacre had inflicted.

The ships sailed for Auckland with the soldiers and refugees on the 13th March, and on their arrival the news of the evacuation and destruction of Kororareka created a panic. Frantic preparations to resist an attack were made at Auckland, Wellington and Nelson, and urgent appeals were sent to Sydney for fresh troops. The natives began to adopt a more arrogant tone than ever towards the "pakehas," and British rule in New Zealand was only saved by the dissensions which sprang up amongst the Maori chiefs themselves. Potatau Te Whero Whero (afterwards first King of the Maoris), for purposes of his own, took sides with the whites, and warned Hone Heke not to attack them. Tamati Waka Nene, who was jealous of the great influence wielded by Hone Heke, resolved to crush him, and prepared to make war against

him. Several sharp conflicts ensued, when Tamati Waka Nene, hearing that troops had arrived, urged the Government to send them on at once. Hone Heke entrenched himself in a strongly-defended "pa" at Mawhe, while Kawiti ambuscaded on a small knoll on the edge of the forest. It was soon found that the "pa" was too strong to be taken without artillery, and the Commandant, Colonel Hulme, returned to Auckland.

Captain Fitzroy then sent to Sydney for more troops and artillery, and early in June Colonel Despard arrived with 200 men of the 99th Regiment, and Major Wilmot brought some cannon from Hobart. Despard was given the command of the expedition, which arrived in the Bay of Islands in June, 1845, and comprised 630 men and 4 guns. Hone Heke had now taken up a strong position in a "pa" at Ohaeawai, and he was there besieged, the attacking force being in the proportion of three to one. Early in the siege the Maoris made a sortie, and captured a British ensign, which was hung underneath Hone Heke's flag on the "pa." This so enraged Colonel Despard that he determined to make an attempt at storming the position, and on the 1st July, 1845, a force of 200 men made the attack. The result was disastrous, as the British had to retire with a loss of forty men. The British Commander now attempted to force a capitulation by cutting off supplies from the besieged, and by vigorous cannonading; but on the night of the 10th Hone Heke and his followers silently evacuated their position without the loss of a single man, and, according to the ethics of Maori warfare, claimed the victory. There was nothing further to be done, so the British destroyed the palisading and retired to Waimate and thence to Auckland. This caused the British "mana" to still further decline, while the arrogance of the Maoris was inflamed, and Hone Heke was looked on as a hero by his countrymen.

Governor Fitzroy now made an effort to secure a cessation of hostilities; but Hone Heke was too much inflated by his victories, and by the adulation of his followers, to listen to peace proposals, so that after about four months had passed away the Governor decided on resuming the war. But meanwhile the news of the affair had reached England, and the authorities peremptorily recalled Governor Fitzroy and appointed Captain George Grey to the position.

Grey was only 33 years of age when he assumed the Governorship of New Zealand, but he had already given proofs of marked ability elsewhere, particularly in his administration of the affairs of South Australia, which colony he had effectually dragged from the mire of insolvency in the short space of four years. He arrived in Auckland on the 14th November, 1845. Grey first set about the task of reducing the warlike Hone Heke to submission, and he entered on the work with characteristic energy and vigour. He issued a proclamation, warning the natives to return to their allegiance by a fixed date, and to observe the Treaty of Waitangi, the provisions of which he pledged himself to scrupulously respect. Hone Heke and Kawiti were

offered conditions of peace, but refused any terms involving forfeiture of their tribal lands. The Governor now returned to Auckland and caused to be enacted the "Arms Importation Ordinance," which prohibited the Maoris from acquiring arms, gunpowder, or other munitions of war. This step was opposed by some of the settlers, who feared that the new regulations might irritate the "friendlies" and cause them to throw in their lot with the insurgents. However, subsequent events proved that the Gevernor's action was a wise one. Colonel Despard was put in command of a force of 1,173 men to attack the stronghold of Kawiti at Ruapeka-peka. The friendly chief Tamati Waka Nene, accompanied by Mohi Tawhai and other prominent "rangatiras," assisted the English with a force of 450 Maoris. A small detatchment of these "friendlies" made a feigned attack on Hone Heke at Ikorangi, but the main body of the allied forces besieged Ruapeka-peka. The investment of the "pa"—which was a model of scientific defence, and the plans of which, preserved in the Auckland Museum, still excite the admiration of military engineers—began on the 21st December, 1845. As usual, it was found that the stronghold could not be stormed, but the besiegers gained possession of it by an accident, when it was left undefended by the Maoris one Sunday during their celebration of divine service. When the surprised natives discovered the British occupation they attempted to regain possession, but were driven back with loss. Although thirty British were killed and thirty wounded in the struggle, the blow given to Hone Heke's "mana" ended the war, and the insurgents soon dispersed. Hone Heke sued for peace, and the Governor granted a pardon to all concerned in the rebellion, on condition that they returned quietly to their tribal lands. The rebel leader's offence was condoned, and since then there has been no further trouble with the natives whose lands lie north of Auckland—the Ngapuhi and Ngatiwhatua. Like many of his compatriots, Hone Heke died a few years later of consumption. Kawiti, his confederate general, lived for some years longer, but gave no further trouble. Tamati Waka Nene, the friend of the British, received a pension of £100 a year till his death in 1871, and the Government of New Zealand erected a handsome monument over the remains of this faithful ally.

The Governor having quelled the disturbance in the north of the Island, now turned his attention to the southern portion. The murderers of Captain Wakefield and his party were still at large, and several murders of settlers by the Maoris had since been committed. Hoping to nip the insurrection in the bud, Captain Grey hastened southward with a detachment of soldiers, but the rebels under Rangihaeata retreated to a strongly fortified "pa," which it would have been impossible to storm. Leaving a garrison to guard the settlers, Grey withdrew, but shortly afterwards the Maoris defeated a party of soldiers under Lieutenant Page, of whom six were killed and four wounded. A detachment of the 99th Regiment was also attacked and

many were killed, while various murders were committed by the blood-lustful natives, and a regular panic ensued amongst the colonists in the Wellington district. Rangihaeata meanwhile never gave the troops an opportunity of a decisive engagement, but always fell back when they appeared in strength. Captain Grey now determined on a bold stroke. From information secretly received he had come to the conclusion that Te Rauparaha was in league with the rebels, and he resolved on his capture. He therefore proceeded to Porirua, and, surrounding his residence by night, captured him and his perfidious companions, and kept them as prisoners on board H.M.S. "Calliope." The Maoris were astounded at the news, and Captain Grey's "mana" was immensely strengthened. Rangihaeata evacuated his "pa" at Pahautanui and retreated up the Horokiwi Valley. Eventually, his followers dispersed, and the rebellion came to an end.

In May, 1846, the great Maori chieftain, Te Heu Heu, the only one of the great chiefs of the North Island who refused to sign the Treaty of Waitangi, was buried alive, with fifty-four of his adherents, in a land-slip at Taupo.

At this time matters were in a peaceful condition, when another disturbance broke out at Wanganui, where most of the disaffected Maoris had gathered after the dispersal of the Rangihaeata and Te Rauparaha faction. On the 16th April, 1847, a midshipman belonging to H.M.S. "Calliope" accidentally shot a Maori "rangatira" through the cheek. Maori custom demanded revenge, and two days afterwards the house of a settler named Gilfillan, 6 miles from Wanganui, was raided, and his wife and four children were slaughtered. The assailants were captured by the "friendlies" and delivered up to justice, four being executed after trial by court-martial. War immediately broke out, and on the 19th May 600 hostile Maoris swooped down on the settlement. Their attack was bravely resisted, and after pillaging the town the assailants retired to a position about 3 miles distant. Meanwhile the Governor received news of the position of affairs, and reinforcements were despatched to the scene. After a few indecisive struggles the natives abandoned the campaign, naively saying, "We cannot remain any longer; we must go and plant our potatoes."

During the troubled period, from the sacking of Kororareka to the conclusion of hostilities at Wanganui, close upon a million of money was expended, while the casualties comprised eighty-five soldiers, seamen, and militia killed, and 167 wounded. The colony now entered upon a period of comparative repose, and enjoyed it for about fourteen years.

Immediately on his first arrival at Wanganui, while skirmishing was going on between the forces and the natives, the Governor received certain official despatches, by which he obtained the first intelligence that the British Parliament had bestowed a new Constitution on New Zealand, and that new modes of dealing with native lands were to be adopted concurrently with the new institutions. These despatches had already appeared in the *London Gazette*, and contained language re-

lating to the rights of the Maoris to their lands calculated to provoke a breach of the peace between the two races; and it appeared that language similar in tone and meaning had been employed during the debate in Parliament on the new Constitution, and had, moreover, been republished in the English newspapers which arrived in the Colony at the same time as the despatches. Captain Grey regarded it as quite possible, therefore, that the intention to deprive the Maoris of their lands, which appeared in the new line of policy proposed for adoption, would undo all the work of conquest, and lead to a great national combination of the whole of the native tribes, and thus bring about a long, destructive, and costly war. He therefore considered it his duty to return the despatches, and the charter that came with them, to the Home Government, in order that the subject might be more fully considered, and also that delay might be obtained in the promulgation and enforcement of documents which it was to be feared would give rise to serious complications, if not to great national calamities.

The centre of the North Island was occupied by the Waikato, the Ngatimaniapoto, and the Ngaiteraangi nations—three great tribal confederacies, comprising many thousands of armed men. At irregular distances along the western and eastern sea-coasts were situated isolated and practically defenceless European settlements. The Tamaki district and the shores of the Manukau formed the road by which the northern and the southern tribes went to wage war with one another, and the Governor resolved to occupy this highway of warriors, which was much too near the capital to be consistent with its safety. When the settlement of Kororareka had been looted and burnt, the people of Auckland became absolutely panic-stricken with fear at their own town's defenceless condition; and now, peace being insured, the time seemed opportune to provide for the permanent safety of the capital against attack from a southerly direction. To accomplish this, Captain Grey obtained from England a number of discharged soldiers, who were enrolled for seven years' service in New Zealand, and stationed in four settlements around Auckland. Each man had built for him a cottage on an acre of land, and could, on the completion of seven years' service, obtain from the Government 5 acres more. The first detachment of the new force, which became known as the "New Zealand Fencibles," arrived in October, 1847; and in a few months this military colony, with the wives and children of its members, numbered 2,000 persons. This was an admirable piece of forethought on the part of the Governor, and did much towards allaying the fears of the unwarlike section of Auckland's inhabitants.

For his success in setting things generally to rights in New Zealand, Captain George Grey was knighted. On February 26th, 1848, Lord Grey wrote to his namesake, saying,—"I have very great pleasure in communicating to you that Her Majesty has been pleased to approve of your being a Knight Commander in the Civil Division of the Order of the Bath, for the great ability and success with which you have admin-

istered the affairs both of South Australia and of New Zealand." When the time for his investiture arrived, the new Knight pleased the Maoris immensely by choosing for his esquires the friendly chiefs Tamati Waka Nene and Te Puni; indeed, the Maoris began to regard the "Pakeha Rangatira" with an affection and an esteem that in some instances well-nigh approached idolatry.

On the establishment of tranquillity the Governor undertook the formation of roads, useful alike in peace or in war, and employed the natives upon their construction. He also settled, as far as possible, all outstanding law claims. Nor did the moral and physical welfare of the Maoris escape his attention. He saw to the establishment of schools for their children, and advised them even on matters pertaining to their health.

Having chastised and educated the Maoris, Sir George turned his attention to the great question of colonisation. During his administration, the whole of the South (or as it is unnecessarily and officially called, the Middle) Island, and several valuable districts in the North Island, were purchased from the tribes by Messrs. McLean, Mantell, and other officers of the Crown, and thrown open for settlement. Besides being employed largely in public works, such as road-making, barrack-building, and the rough work of engineering, some of the natives were enrolled as policemen, and several "rangatiras" were appointed magistrates to try cases between their own countrymen. The payments the Maoris received for land were frequently made in instalments of stock, and every encouragement was given them in the pursuit of industry and peace. Hospitals were erected for them, and the Governor strove to instil into their minds the principles of sanitation. Under these changed conditions, immigration began slowly to revive. The Company's settlements at Wellington, Wanganui, New Plymouth, and Nelson, which had dropped so low, now began to expand. Otago was settled in 1848; or rather, a commencement of the work of colonisation in that district was made in the month of March in the year named, by the arrival at Port Chalmers of two emigrant ships, sent out by the Otago Association for the foundation of settlement, by persons belonging to, or in sympathy with, the Free Church of Scotland. In 1849, the "Canterbury Pilgrims," as they are facetiously called, made preparations for their Utopian descent upon the shores of the South Island. In that year was formed in England "The Canterbury Association for Founding a Settlement in New Zealand." On the 16th December, 1850, the first emigrant ship dispatched by the Association arrived at Port Cooper, and the work of opening up the adjoining country was set about in a systematic fashion, the intention of the promoters being to establish a settlement complete in itself, and composed entirely of members of the then United Church of England and Ireland. The sites for the settlements of Otago and Canterbury were secured by Governor Grey, who was present at Lyttelton Harbour to receive the immigrants when they landed.

The period was one mainly of peace and preparation; but there were, nevertheless, excursions and alarms, though they were generally capable of being dealt with by the ordinary process of the civil law; but both trouble and danger had to be incurred in order to bring the Maoris into line, and induce them to submit their customs and traditions to British ideas of right and legal usage.

In the month of July, 1850, the New Zealand Land Company gave up its charter of incorporation to the Crown. No clear statement of its financial affairs appears ever to have been published. It is stated by its enemies to have received nearly a million of money, all of which was spent save some £30,000 sterling, and to have been indebted, both to its shareholders and the Crown, at the time of relinquishing business, to the extent of about £500,000 sterling. Nevertheless, Crown and colonists were alike indebted to the Company. For the first, it had preserved New Zealand from becoming a penal settlement of France; the interests of the second it had safeguarded, at a loss both of life and money, from the ill effects of the missionary policy and the rapacity of the protected Maoris. However, the sum of £236,000, owing to the Government by the Company, was cancelled, and another amount of £268,370 was made a charge on the lands of the Colony.

In the year 1851-2, the Australian gold discoveries took place, and gave a marked impetus to trade, agriculture, and every branch of industry in New Zealand; though they also had the effect of drawing from the islands a certain portion of the settlers, who were impatient of the slow methods of making a fortune offered by culture of the soil, and who hastened to the continent to participate in the realisation of the Aladdin's dream which was luring with equal potency the adventurers of civilised Europe, and of uncivilised Asia.

In the year 1852 a representative Constitution was granted New Zealand under the Imperial Act, 15 and 16 Vict. c. 72, framed by Sir John Pakington, the Colonial Secretary, who was mainly guided in his task by the recommendations and suggestions of Sir George Grey. Under the measure, six provinces were created, namely Auckland, Wellington, Nelson, Canterbury, Otago, and Taranaki, the Governor defining their boundaries.

The mention of Otago and Canterbury as provincial districts so early, as defined in the Constitution Act, might lead to the supposition that they were already of political consequence. This, however, was not so. In marking their boundaries Sir George Grey was engaged more in making provision for future expansion than for meeting present needs. The first Otago pioneers landed at Port Chalmers on the 22nd March, 1848, from the "John Wickliffe." A second emigrant ship, the "Philip Lang," arrived on the 15th April following. They comprised a colony of Scotch Presbyterians, their leader being Captain Cargill, a Peninsular veteran, and a descendant of Donald Cargill. The town of Invercargill still preserves the name of the founder of Dunedin. It is noteworthy that in 1898 Otago celebrated her jubilee,

and that Captain Cargill's son was then Dunedin's mayor. For years, however, the progress of the new settlement was slow, and it took the colonists a long time to win their way through to the more fertile country which lay beyond the rugged hills that fronted the sea. The newcomers were intensely Scotch, but later the character of the settlement changed, though slowly. The Scotch element did not disappear, even in the wave of gold seekers that swept over the island in 1861; and it has not disappeared yet, although it is much modified. The first pioneers, or "old identities," are, however, becoming rarer with every year, and some aspects of Dunedin are almost cosmopolitan.

Very different from Otago was the sister settlement, Canterbury—the most conservative attempt ever made at colonisation in the whole British annals. The settlement of Canterbury was intended to be an oversea paradise for aristocratic Anglicanism, and owed its existence to the late Lord Lyttelton. The price of land in the Canterbury block was put down at £3 per acre; of this sum, £1 was to go to the support of the Church and the advancement of education, and £2 was to be spent in the work of developing the settlement. The idea of the "Canterbury Pilgrims" was the transplanting to New Zealand of rural England as it then was, with all its social gradations, from an earl and a bishop on the top to a sublimated English labourer on the bottom. It did not work this vision of the impossible, though every effort was made to make it do so. The name of the capital of the province is borrowed from an ancient seat of ecclesiastical learning. The very streets in the Old World-flavoured city had given them the names of Anglican dioceses throughout the world; but the earl and its bishop liked not the hardships of pioneering, and quickly turned their backs on the facts that confronted a young country which had to deal at first hand with nature. Nevertheless the settlement thrived and grew apace; though not in the way its founders had intended. The features of the South Island in these early years were endowed churches, great pastoral leasehold properties, the absence of a Maori question, and wealthy territorial magnates.

The Governor was sharply attacked for his administration of affairs, and the colonists were especially incensed with him for his action in shelving the Constitution devised for them by Earl Grey. Nevertheless he adhered to the course he had marked out for himself, and notwithstanding the bickerings and onslaughts stuck steadily to his work and bought land. He acquired the whole of the South Island, and managed to lay his hands upon millions of acres in the North Island. Then came the question, should it be sold or leased to the settlers? Up to the year 1852 the colonists everywhere except in the north dealt with the New Zealand Company, and not with the Crown; but now the Company was no longer—it had disposed of its interests to the Crown for all futurity. Again, the Governor made things very hard for himself, because he insisted upon putting a stop to the Church endowment system; and altogether his relations with the white popu-

lation over which he ruled were extremely unhappy at this period. Grey however, made a blunder in the framing of his Land Regulations in 1853. Under this code the price of land was reduced to 10s. per acre; but no limitations were put upon the area any one person could acquire; consequently, instead of close settlement, the island soon presented a spectacle of ducal estates and royal forests—immense areas, cheaply purchased by wealth, and locked up against colonisation. Grey probably did not foresee this result of his code, but it was destined to have lasting and mischievous effects on the future of the colony. Nevertheless, Grey's wise and steadfast rule in other respects brought prosperity to the country, and he left it in profound peace. The European population, which numbered 12,774 in 1845, had increased in 1853 to 30,678. The revenue in 1845 was £12,899; in 1853 it amounted to £147,820. The Governor left New Zealand on the last day of the year 1853, after a rule of eight years. He was only 33 years of age when he undertook to restore peace and order to a country sunk in financial mire and vainly waging an unsuccessful war: he left that country, his task fairly and honestly completed, though at the expense of his popularity among his own countrymen.

Lieutenant-Colonel Wynyard, Commander of the Forces, became Administrator of the Government on Sir George Grey's departure, and brought the New Zealand Constitution into practical operation. Colonel Wynyard's rule of nearly two years was a period of quiet progress, though at one time something like a Maori rising was threatened. This was brought about by the discontent felt by the alleged inadequate punishment of a man named Huntley, who struck dead a native woman in the town of Auckland. The jury brought in a verdict of manslaughter; but the dead woman's kinsmen clamoured for the life of the slayer, on the old reckoning of blood for the shedding of blood. However, the authorities were inflexible, and the native feeling gradually subsided. During the following year a more emphatic demonstration, occasioned by a somewhat similar crime, was satisfied only by the execution of the criminal. A settler named Marsden had killed a Maori woman while he was suffering from an attack of *delirium tremens*, and the prisoner was convicted on trial and formally sentenced to death. There was an unusual delay in the carrying out of the extreme penalty of the law, and this gave rise among the natives to a report that the life of a Maori was esteemed by the authorities as being less valuable than that of a white man. Just about this time the native mind became additionally inflamed by another murder of one of their race at the hands of a drunken settler, and 300 men belonging to the tribe of the murdered woman made a demonstration, and threatened to cut down the flagstaff from which floated the British ensign. In February, 1856, Marsden was hanged, and the Maori sense of justice satisfied.

It is claimed for the new Constitution, which was mainly the work of Sir George Grey, that it evidenced, by the fact of its having worked

without alteration for twenty-two years, and in great part worked exceedingly well, that it was therefore peculiarly adapted to the particular needs of the colony at that time. This is, however, a matter upon which criticism of the colony's political history has declined to agree. Briefly stated, the following are the leading characteristics of its machinery:—A Central Parliament, consisting of two Chambers, and side by side with it six Provincial Councils (one Chamber); over the Parliament, a Viceroy, ruling through Ministers; over each Provincial Council, a Superintendent, elected, like the Council, by the people of his Province; each Superintendent to have a small executive of officials, who were themselves to be Councillors—a species of Provincial Cabinet; the Central Parliament or General Assembly to have an Upper House, called the Legislative Council, to be elected (in Sir George Grey's original draft of the Constitution) by the Provincial Councils. At this provision the Colonial Office demurred, and substituted nomination by the Crown. If the original proposal had been carried into effect, New Zealand's Senate would have been powerful enough absolutely to eclipse the Lower House. The latter was to be elective, on a liberal though not universal franchise. Grey did not set his own machinery in motion. He called into being the Provincial Council, and left the summoning of the General Assembly to his successor. The first Parliament of New Zealand was summoned by proclamation, dated January 15th, 1854, to meet upon the Queen's Birthday following. Mr. Charles Clifford, of Wellington, was elected Speaker of the Lower House, and Mr. William Swainson, the Attorney-General, was appointed President of the Council. No sooner had the General Assembly met than a difficulty arose: there was no provision made in the Constitution Act for ministerial responsibility, the measure having left it open for the colony to select the form of its Executive Government; nor had the Colonial Office sent the Governor instructions on the subject. The offices of Colonial Secretary, Treasurer, and Attorney-General were held direct from the Crown, and their holders formed (and were determined to form), with the Governor, the Executive of the colony. Governor Wynyard took refuge from his difficulty concerning ministerial responsibility by inviting to the Executive Council, Messrs. James Edward Fitzgerald, Henry Sewell, and Frederick Aloysius Weld—all influential members of the House of Representatives. James Edward Fitzgerald was the colony's first Premier, and on all sides it is agreed that he was entirely unfitted to cope with the peculiar difficulties attending the introduction of Responsible Government. At all events, the arrangement introduced by the Governor refused to work with even a semblance of smoothness. Within a few weeks Fitzgerald was at loggerheads with the permanent officials of the Cabinet, and he and the two other popular Ministers resigned. They were succeeded by Messrs. Thomas Spencer Forsaith (formerly a sub-protector of the native population and Government interpreter) as Premier, Edward Jerningham Wakefield, William T. L. Travers, and James Macandrew. This combination is known to

New Zealand political history as the "Clean Shirt Ministry," because its leader innocently informed Parliament that, when asked by the Acting-Governor to form an administration, he had gone upstairs to put on a clean shirt before presenting himself at Government House. The "Clean Shirt Ministry" lived for exactly two days.

Things were now at a deadlock, but a compromise was at length arrived at: Colonel Wynyard was to manage, as well as he could, with his Patent Officers until a Bill could be passed and assented to in England establishing Responsible Government, and then the old officials could be pensioned off. More than one Ministry resigned office before the 16th September, on which date the Parliament was prorogued. The address to the Governor, which expressed the willingness of the House to grant supplies to a Government conducted by the old Executive—the compromise agreed upon, pending instructions from England with regard to Ministerial responsibility—was acted upon, and thus several Bills became law, the most important of which gave the Provincial Councils the management of the waste lands of the several provinces. Next year the General Assembly began business on the 8th August, when the Acting-Governor informed the Parliament that Her Majesty's Ministers had no objection to the establishment of Responsible Government, provided the Colonial Secretary, the Colonial Treasurer, and the Attorney-General were pensioned; and that no enactment was necessary for the formation of Responsible Government, as the practice rested on usage only.

Notwithstanding Acting-Governor Wynyard's expressed eagerness to introduce Responsible Government, a year passed by before the General Assembly was summoned together; and then it transacted merely formal business, as His Excellency had taken upon himself to ordain that there should be a dissolution prior to the establishment of of responsible portfolios. Thus the matter was deferred till the middle of the year 1856, when Colonel Wynyard had left the Colony. During his régime there had been little native trouble, business was brisk, sheep-farming in the South Island was progressing, and New Zealand was growing prosperous through the steady demand for its produce, brought about by the gold discoveries in Australia.

Colonel Thomas Gore Browne, C.B., the next Governor, assumed the reins of office on the 6th September, 1855. On the 15th September, 1855, the Governor prorogued Parliament, to enable the people to elect members, from whom responsible ministers could be chosen. The new General Assembly met at Auckland in May, 1856. In the new House of Representatives, Mr. Clifford, of Wellington, was again chosen Speaker. From the 7th May to the 2nd June three Ministries succeeded one another. The first passed a Pension Bill, granting the officers appointed by the Crown two-thirds of their salaries as retiring allowances; and leaving things clear for the exercise of ministerial responsibility. The third, or Stafford Ministry, held office for over five years, and was instrumental in giving a permanent trend to the course of New

Zealand's political history. On its first meeting, in 1854, the General Assembly quickly showed that it was broadly divided into two strongly marked parties—the "Centralists" and the "Provincialists," or those who desired the General Assembly to be paramount in all political matters, and those who were jealous of its power, and desired that both the general and local functions of the colony should be managed by the Provincial Councils. Edward William Stafford, the organiser of the first stable Ministry, was a "Centralist"; but he held no office himself for some six months after the formation of the Cabinet in June, 1856, assuming the office of Colonial Secretary in the month of November following. Mr. Stafford and three practising lawyers divided the portfolios among them, the others being Messrs. Whittaker, Richmond, and Sewell. Before leaving England, Colonel Browne had had an interview with Lord Elgin, the ex-Governor-General of Canada, who impressed upon the outgoing official the advisableness of absolutely and docilely following the advice of his responsible Ministers; and this the new Governor intended implicitly to do. But the most troublesome functions of government were still left to the administration of the Queen's representative. These were the purchase of land, and all matters specially affecting the natives. Ministerial responsibility here stopped short. These were affairs of Imperial concern, and, as such, under the direct control of the Viceroy, who was counselled to take the advice of his Cabinet, but not necessarily to follow it. The Native Department remained, therefore, practically a secret service, and on the shoulders of Governor Browne must rest the responsibility of involving the colony in the disastrous wars that began in 1860, and continued, with intermittent spasms of troubled peace, until 1870.

About the time when the General Assembly first met in Auckland, and the Government of New Zealand was handed over to the white population, the native mind formulated two distinct aspirations: one was the provision of a local form of government for the race; the other was the prevention of further alienation of tribal lands. Both these desires of the Maoris were regarded by the dominant whites as inimical to the welfare and the progress of the country. The natives might have been led, but they could hardly be repressed; and Governor Browne was incompetent to direct the movement which clamoured for a sovereign chieftainship over a cohesive and united Maori nation. The King aspiration was a conundrum to him; and he, unfortunately, essayed its solution at the wrong end. It began to assume meaning and importance shortly after the Governor arrived in the Colony. In native affairs, he at first took a very independent attitude, and assumed a right of personal judgment altogether unjustified by experience. He was the first to discover this; but was unfortunate in his advisers, through whose eyes he soon learned to look at all matters of public policy—native and European. Grey could have diverted the King movement into a useful channel; Browne drove it into a rebellion and bloody war. As early as 1843, disputes between

the settlers of New Plymouth and the natives as to the ownership of certain lands had ended in Governor Fitzroy's deciding that territory acquired by a tribe through conquest did not altogether pass away from the vanquished, but that the latter still retained some claim. As a result of this decision, the original fugitives from Taranaki, dispersed in pre-historic times by the incursions of Te-Whero-Whero, and various Waikato chiefs, began to drift back again to their ancestral holdings. Among others came Te Rangitake, or, as he is more commonly called, Wiremu Kingi (William King), chief of the Ngatiawa, with 600 followers from Otaki, to settle down on the lands of their forefathers on the southern bank of the Waitara River, ten miles from New Plymouth. These returned emigrants had a strong disinclination to part with their holdings to the white settlers, who were particularly anxious to purchase them. The native communal ownership also entered into the difficulties that confronted the new Governor. The Taranaki tribes formed an anti-selling league, and, in order to invest their proceedings with due sanctity, buried a Bible in the ground, and raised over it a cairn of stones to mark the sacred spot. In 1854, a chief named Rawiri Waiaua, who had held himself aloof from this association, on account of his drawing a salary from the Government as an assessor, offered for sale a portion of the Hua block, of which he claimed the ownership. Now this chief was interested, in common with the principal leaguers, in the remainder of the block; and the Government Commissioner urged him to dispose of his entire rights. Waitere Katatore, and the other representatives of the tribe, warned the Commissioner that if he ventured to bring the surveyor's chain upon the land, he would have to come with an armed force, as they were resolved to resist the sale to the death. The Commissioner was, however, insistent; and Rawiri Waiaua, yielding at length against his better judgment, announced his decision to sell his rights. This complaisant part-owner thereupon assembled his fighting men and took the chain upon the land himself. Waitere Katatore appeared on the scene at the head of sixty warriors, and informed Rawiri Waiaua that he had better desist. The latter declined to take the proffered warning, and the other commanded his men to fire a volley. The order was carried out, and Rawiri Waiaua and seven of his men were killed, and sixteen wounded. The trouble spread far and wide, panic seized the settlers, and the Government, in the month of August, 1855, sent 450 soldiers of the 58th and 65th regiments, under Major Nugent, to New Plymouth. Governor Grey had then left for England about eight months, and Colonel Wynyard, the officer administering the Government, followed the troops to New Plymouth, accompanied by Tamati Waka Nene, Te Whero-Whero, and Te Puni, all three faithful allies of the British. The Acting-Governor investigated the circumstances of the affair, but declined to avenge the death of Rawiri Waiaua, on the ground that that chief had been killed for offering to sell land to which he possessed no title. A force of 250 soldiers was, however, left at New Plymouth for the protection of the

settlement. The inter-tribal war was then resumed by the natives, the Government remaining quiescent. In due course, Waitere Katatore and his half brother were treacherously murdered by a chief named Ihaia (Isaac), who was allowed to go free. Guerilla fighting now continued for about two years. In the encounters that took place, sixty natives were killed and 100 wounded before a truce between the belligerents was made in the month of December, 1856. The Government then recognised that it had made a mistake in not intervening, and the principal chiefs of the North Island were invited by the authorities to a conference with the Governor on native affairs, at Kohimarama, in the neighbourhood of Auckland. About fifty of the head "rangatiras" attended, but as the inaugural address was, in the main, a special argument in support of the sale of land, the Maoris regarded the whole proceedings as a crafty attempt to out-manœuvre them, and more harm than good was done by the meeting. Meanwhile a movement of the utmost importance was making silent but strong headway among the natives. To weld into a homogeneous whole the tribes leagued together to prevent the sale of native lands, a number of the leading Waikato chiefs, of whom the most celebrated was Tarapipi (Wiremu Tamihana), usually known as William Thompson, determined to elect a king. Drunkenness and its sequent evils were sapping the vitality of the race. The lands of the tribes were slipping from their weakening grasp. Before the war the Maori was alleged to be equal with his European fellow subjects of the Queen. In reality he was looked upon as an inferior and a vanquished alien, and treated with contempt. The most enlightened of the native chiefs, anxious for the salvation of their countrymen, determined to set up a central authority of their own, empowered to arrest some of the evils threatening the continuance of the Maori race. The King movement began to take shape in 1853, when a chief named Matene Te Whiwhi set out for Otaki with several other leading "rangatiras," and visited Taupo and Rotorua to obtain the consent of the more powerful tribes to the election of a sovereign of native blood, and the constitution of some kind of recognised government in the central districts of the North Island, where Europeans had not then settled; but jealousy of his own assumed pretensions defeated the success of Matene Te Whiwhi's mission. The time was, perhaps, not quite ripe, and the "runanga," which met to consider the project, issued the following letter to their countrymen:—"Listen all men! The house of New Zealand is one. The rafters on one side are the Pakeha; those on the other, the Maori; the ridge-pole upon which both rest is God. Let therefore the house be one. That is all!" However, the necessity for some form of central government in the districts inhabited exclusively by the Maoris did not disappear with the enunciation of this oracular utterance; and even the white settlers recognised as much. Indeed, so absolutely was the large and thickly populated Waikato district left to its own devices, that the Rev. Mr. Ashwell, a missionary stationed at

Taupiri, stated before a Committee of the new House of Representatives, that during nineteen years prior to the King movement he could not remember more than three or four visits to the territory by any officials; and other districts again had not received even that small meed of attention. In a memorandum dated May 25th, 1861, Governor Browne stated that "some of the most populous districts, such as Hokianga and Kaipara, have no magistrates resident amongst them; and many, such as Taupo, the Ngatiruanui, Taranaki, and the country about the East Cape, have never been visited by an officer of the Government. The residents in these districts have never felt that they are the subjects of the Queen of England, and have little reason to think that the Government of the Colony cares at all about their welfare." Sir George Grey bore somewhat similar testimony. Writing to the Secretary of State, on December the 6th, 1861, he said: "Ten years since, the urgent necessity of introducing simple municipal institutions among them (the Maoris) was pointed out, and the first step taken to refer their disputes to our courts; but, though various proposals have been made for facilitating a further advance towards these objects, the matter has been practically left nearly where it then was." Briefly stated, the articles of the Treaty of Waitangi had been simply ignored by the British authorities. The measure spoken of by Sir George Grey as a first step towards inducing the natives to refer their disputes to European courts, was an ordinance for appointing Resident Magistrates to exercise jurisdiction in civil cases between white colonists and Maoris in claims where the amount sued for did not exceed the sum of £20 sterling. There were, however, no means provided for enforcing judgment in those cases in which the native was the losing party. For dealing with cases of exclusively native disputes, a number of "rangatiras" were appointed assessors, each party to the suit being at liberty to select one assessor to sit in judgment conjointly with the magistrate. The useful work done by these Courts was extremely limited, and the Government made little effort to improve matters. The cost deterred it, for all the revenues of the colony were needed for the purposes of settlement and white administration. Then, again, the Imperial Government considered that it had done, and was doing, quite enough for the colony, in bearing the expense of the military establishment; and declared that it had no funds to spare to throw away upon the natives. So the policy pursued was the only one possible under the circumstances, namely, that of abstention from interference in all purely Maori concerns. Nevertheless, some attention was paid to the natives by the authorities. A liberal distribution was made of blankets, sugar, flour, and other articles of white "trade," in order to win over and attach to British interests the leading chiefs. This effort at native conciliation has been sufficiently jeered at by the unsympathetic, as "The Flour and Sugar Policy;" yet in the days of its employment it served a by no means useless purpose. Of course, as

time went on it grew less effective, as the noisiest natives were the recipients of the largest bribes to induce good behaviour. Excessive kindness to any one section of the Maoris irritated its neighbours; and tribal wars became affairs of everyday occurrence. One reflective chief described these quarrels as "a river of blood" flowing through the land. Wiremu Tamihana Tarapipi managed to save his tribe from the utter demoralisation of drunkenness only by ejecting every white man living among his people. Even the "Pakehas" who had married Maori women were not exempt from the operation of this regulation. They had to go, and leave their families behind them; though the chief permitted the settlement of a few mechanics, by whose skill he expected to profit; but such as were allowed this privilege had to sign a bond to pay £1 for every native found drunk on their premises. Among the tribes where this precaution against it was not taken, drunkenness was greatly on the increase.

Matene Te Whiwhi had failed to secure the definite acceptance of his proposals in 1853; but the King movement, nevertheless, silently progressed. In May, 1854, another great "runanga" was called together at Manawapou, in the territory of the Ngatiruanui nation. At the place of meeting a council hall was built, 120 feet long and 30 feet wide, with two entrances. This building was called "Taiporohenui," or "The Finishing of the Matter." There a league for the preservation of the native lands, similar to that of Taranaki, was formed, and a tomahawk was passed round to signify that all would agree to put to death any leaguer who should depart from the purpose of the compact. In the year 1856, Te Heu Heu, who had adopted his brother's name on succeeding him in the Taupo chieftancy ten years before, called together another "runanga." The French Standard was hoisted, and several schemes were discussed for the preservation of Maori autonomy. No conclusive decision was, however, arrived at, although it was distinctly proposed that Potatau Te Whero Whero, the great chief of the Waikatos, should be made King. True, he was now broken and enfeebled, but he had once been a famous warrior and a man of might and "mana." The chiefs concerned in the movement disclaimed hostility to Queen Victoria, but they determined to sell no more land. They would not permit the Queen's writ to run beyond their frontier boundary, or boats and steamers to navigate their streams. There was some wild talk also of driving the "Pakehas" into the sea; but this was confined strictly to their own council meetings. Thus, after years of argument, speech-making, negotiation, and discussion, the Maoris were on the eve of taking the final step in the establishment of a native monarchy. And the Government allowed the movement to drift away into vicious channels, instead of controlling it. Serious blunders were made about this time by the authorities; and Wiremu Tamihana, who was still open to conciliation, was effectually estranged by an act of official stupidity.

It is alleged by historians who sympathise with the King movement that the choice of Potatau Te Whero Whero as the Maori monarch was

politic, inasmuch as he was not ambitious of the dignity, and was, therefore, unlikely, like Matene Te Whiwhi, to inspire jealousy in the confederating chiefs, and that, moreover, he offered instead to act as arbitrator in land disputes. Wiremu Tamihana, determined to overcome the old chief's scruples, summoned the tribes of the Waikato nation to meet at Rangiriri in the month of April, and instal their King. Governor Browne recognised the political significance of this "runanga," and resolved to attend it. He therefore set out for the Waikato district (the King Country as it was subsequently called) with Mr. (afterwards Sir) Donald McLean, the Native Secretary, and Mr. Richmond, a Member of the Cabinet. He reached Rangiriri at the same time as Te Whero Whero, in whose presence the leading "rangatiras" made speeches to the Governor. They asked for authorised "runangas," a European magistrate, and laws adapted to their circumstances. The Governor replied that he would send a magistrate to live in the Waikato district for the purpose of making circuit visits to the various native settlements, and, with the aid of the Maori assessors, administering justice. He further promised to have framed a code of laws applicable to the native requirements. The people assembled at the "runanga" at this assurance cried out "Hurrah," and waved their hats. Potatau Te Whero Whero said that the Governor's words should be his counsel. Colonel Browne then returned to Auckland, hugging the delusion that he had settled the King business effectually. Mr. F. D. Fenton, a well-known solicitor, was sent up as Resident Magistrate for the Waikato and Waipa Districts, and the Governor regarded the affair as ended. In fact, he considered that his offers were a substitute for the proposals of the natives, whereas they regarded His Excellency's action as commendatory and complimentary. They saw nothing contradictory in essence between the declaration of their nationhood under an elective monarch of their own race and the continuance of the Queen's authority in the land, and many of the leading white citizens holding responsible positions in the colony thought similarly. The Governor returned to Auckland, but the "runanga" at Rangiriri was continued. The invited came in fifty canoes, and the conference was inaugurated by the men of the Ngatihaua nation forming four deep in the military fashion, and planting in the centre of a large open space the chosen emblem of Maori sovereignty—a white banner with a red border, and bearing as a device two red crosses symbolical of Christianity, and also the inscription, "Potatau, King of New Zealand." About 200 Maoris were present at this ceremony. The Union Jack was hoisted side by side with this new standard, and the speakers emphasised the assurance that the movement for Maori monarchy was in no way a demonstration of disaffection towards England's Queen. Then for several days much talk was indulged in, and the whole party adjourned to Ihumata, a native village on the Manukau, about 8 miles from Auckland, where another "runanga," at which Bishop Selwyn and other clergymen were present,

was held. This meeting ended in the acceptance of Potatau Te Whero Whero as King of the new Maori nation, and at the end of the year the recently made monarch abandoned his settlement at Mangare, on the other side of the Manukau River from Onehunga, and went up to live in the Waikato district among his most loyal and perfervid subjects. At Ngaruawahia, the capital of "Maoriland," in the month of April, 1858, Te Whero Whero was formally proclaimed King in the presence of about 2,000 people, and saluted as "Potatau the First." It is recorded as a curious fact that his pension continued to be paid up to 31st March, 1860, or within a few months of his death, which took place on the 25th June, 1860, and that even then the Government contributed towards his funeral expenses. In May, 1860, a grand "runanga" was held at Ngaruawahia for the completion of the establishment of the monarchy. A system of native police, and the nucleus of a standing army were called into being, a Parliament or Council of Chiefs was summoned, village "runangas" for the administration of justice were instituted, and funds were actually got together for the founding of a native newspaper. After the death of "Potatau the First," his son, Matutaera, was proclaimed King by Wiremu Tamihana, under the title of "Potatau the Second." In after years he adopted the name of Tawhiao, by which he is historically known. For a couple of decades the King movement was destined to form an important factor in native affairs.

Governor Browne had been, in the meantime, guilty of a particularly foolish act. Events were rapidly making for war, and a certain course of procedure on the part of the Government did much to precipitate matters. When Grey came to rule over New Zealand, his first ordinance was one to regulate the importation and sale of arms to the natives. This enactment was virtually repealed in 1857. A certain amount of smuggling had gone on in spite of it. The Government, therefore, should have spent money and used vigilance in enforcing its regulations, instead of adopting the insane course of relaxing them. The result of doing the latter was a rapid increase in the number of guns and the quantity of powder sold to the disaffected Maoris, who purchased many thousand stands of arms and large quantities of ammunition. Ten years of peace and prosperity had made the natives comparatively rich through the supply of produce to the Europeans. Wiremu Tamihana (now henceforth known historically as the "Maori King-maker") was a shrewd observer of all that went on, and he subsequently stated that "every vessel from Australia brought cheap guns for the Maori trade."

Governor Browne paid a visit to the settlement early in the year 1859, and declared to the natives that he intended to adopt an entirely new policy in the buying of native lands, and to deal at first hand with individual claimants, disregardful of tribal rights and the influence of the "rangatiras." In short, the misguided Governor wanted to enforce the English land system of modern times, and the evolution of

generations, on a race of people whose usages regarding land tenure resembled in a great measure those in vogue among the Irish under the Brehon traditions. When the new land policy was inaugurated by the Governor, some thirty million acres or more had been purchased from the Maori owners for the purposes of settlement, but not more than a quarter of a million acres were under cultivation. The people of Taranaki district were cramped for room, and looked for territory whereon to expand towards the mouth of the Waitara River. This legitimate desire brought about a condition of affairs favourable to the ignition of the native mind by the spark dropped into it by the Waitara land purchase in 1860. Waitara is a little seaport in the Taranaki district, a section of the North Island where the feeling concerning land purchase had always been especially acute. Sufficient territory had been obtained to enable this settlement (Waitara) to expand into a strip of about 20 miles along the sea coast, with an average width of about 7 miles. During his visit to the district, the Governor, therefore, in order to accommodate the settlers, invited the natives to dispose of their lands. In the meantime the agitation in favour of the King movement so engrossed public attention in the central districts of the North Island, that the new trouble brewing on the west coast almost escaped notice until it burst forth in the blaze of war. Friction between the two races in this part of the Island was acute on account of the steady refusal of the Maoris to part with their lands, the influence of the Anti-land-selling League, under the presidency of Wiremu Kingi the head chief of the Ngatiawa nation, being actively exercised to discourage all sales of his people's territory. In 1858 the Taranaki settlers had fruitlessly memorialised the General Assembly to set aside the tribal rights, and allow such natives as were willing to dispose of their individual claims in communal lands to do so. Early in 1859 Wiremu Kingi sent a message to the Governor, declaring that no more land should be sold in the district extending from New Plymouth to Mokau, and requesting him, therefore, to entertain no proposal for the sale of native lands within those limits. It was just after this notification of the great anti-land selling chiefs that the Governor paid his diplomatic visit to New Plymouth, prepared to carry his new land policy into effect no matter who should oppose him. At a meeting with the natives he stated that he would never consent to the purchase of land which did not carry an undisputed title, but neither would he permit any one to interfere in land sales who had not an interest in the holdings under offer. The Maoris are alleged to have misapprehended his meaning, and to have understood that his intention was to start a new policy by treating with individuals, disregarding the "mana" of the chiefs, and setting aside the tribal rights. However, there was very little misapprehension about the matter, as subsequent events showed that the natives understood him only too well. In response to the Governor's invitation, a native chief named Te Teira, or Taylor, at once

got up with his friends and offered the Governor to part with the lands (600 acres) which they were occupying at Waitara. It appears, however, that Teira and his adherents had no exclusive right to this block of 600 acres, though they occupied it. The land belonged to the Ngatiawa nation, and was endeared to the people by historical recollections, being their first landing place some twenty-five or thirty generations before. Areas had been allotted them by their ancestors for the heads of different families, and divided into sub-allotments for individual holders. Teira, however, pressed his offer, and Mr. McLean, the Native Secretary, replied on behalf of the Governor that he would buy, provided a good title could be made out. The native department and the Governor sent down Commissioners, who, with Mr. Parris, the land-purchaser for the district, spent nearly a year in the investigation of Teira's title. After inquiry they decided erroneously that the native vendor's title was good, and that Teira's party had a right to sell the land, and the head chief no right to interfere. The sale was, therefore, completed in due course. A fair price was paid for the block; and, as Wiremu Kingi threatened war, an armed force was sent to occupy it. Then the astute chief of the Ngatiawa made the disputed block over to the King tribes, and he forthwith became their ally. They did not openly declare war against the Government, but they sent their new protégé numbers of volunteer fighting-men. The Governor, blind to the trend of events, reported to the Secretary of State that while he did not fear that Wiremu Kingi would continue to maintain his assumed right, he had made every preparation to enforce obedience should he presume to do so. Wiremu Kingi did, however, maintain his right, and from this maintenance of his "mana" sprang the Taranaki war of 1860, which lingered until May, 1861, and resulted in the temporary ruin of Taranaki. The land transaction at Waitara is known historically as Governor Browne's Bad Bargain.

Hostilities broke out early in 1860. On the 20th February, in that year, surveyors were sent out to mark the boundaries. By way of protest, the Maoris directed some of their women to pull up the pegs and cut the chain; though no violence was offered. Ten days later, martial law was proclaimed, and a body of troops, under Lieutenant-Colonel Murray, marched to the Waitara block, ten miles from New Plymouth, for the protection of the surveyors. During the night, Kingi's party built a "pa" commanding the road, and stopped an escort. The Governor then issued a manifesto ordering the evacuation of the "pa" on the pain of instant punishment. The natives evacuated the "pa," and the soldiers destroyed it. A few days afterwards a party of some seventy natives returned and built a stockade on the disputed block. H.M.S. "Niger" had just arrived with a reinforcement of the 65th Regiment, and, on the 17th March, Colonel Gold conveyed to the front a detachment of artillery and three guns, 210 men of the 65th Regiment, a party from the "Niger," with a rocket tube, twenty mounted volun-

teers, and a company of the Royal Engineers. The Maoris were summoned to surrender, but refused, and the troops opened fire with shot and shell. This was the firing of the first gun in a war which Dr. Featherstone (the Superintendent of the Province of Wellington) pronounced to be unjust and unholy; and which Sir W. Martin (the Chief Justice) utterly discountenanced. On the night following the attack, the troops found that the stockade had been abandoned, but the natives were entrenching themselves in stronger positions, and were well provided with arms and ammunition. The settlers left their homesteads, and, abandoning the open country, took refuge in their town of New Plymouth. Their women and children were mostly shipped off to the south; the men armed and drilled as a militia. The troops also fell back on New Plymouth, and the district was left to the Maoris, who ravaged the whole country-side, sweeping away the labours of some twenty years with a besom of smoke and flame. The insurgent Ngatiawa chief, who had hitherto held aloof, now overtly joined the movement, while the powerful Ngatiruanui nation also threw in its lot with the malcontents. On the 3rd March, a "pa" on Waireka Hill was unsuccessfully attacked, and the same evening the British forces fell back on New Plymouth. Later on fresh detachments of troops arrived from Australia, so that, by the end of the year, there were 2,300 men in the field, including volunteers. One of the most important of the succeeding events was the attack in June on the Puketakauere, or "L pa," so called from its configuration. In this affair the British suffered a loss of thirty-four killed and thirty wounded, while the Maori casualties amounted to only six killed and eight wounded. New Plymouth was now in a state of close siege, and, although there was a dense forest near the town, fuel had to be procured from Australia. Major-General Pratt now came over from Melbourne to supersede Colonel Gold in the command, and brought with him the remainder of the 40th Regiment. For some time no decisive engagement took place, until the conflict at Mahoetahi, when the enemy lost thirty-four killed and fifty wounded, while the British casualties were four killed and sixteen wounded. Taiporotu, the rebel leader, was killed in this engagement. The war terminated a little later during the progress of the siege of Pukerangiora, a truce being negotiated through the instrumentality of Wiremu Tamihana Tarapipi. It has been computed that this outbreak, before it was brought to a peaceful conclusion by Sir George Grey, cost the British sixty-seven killed and 143 wounded, and most of the latter died of their injuries through overcrowding in New Plymouth; while upwards of 200 settlers died through exposure. The total cost of the war to the Imperial Government was about £500,000; while the colony's expenses occasioned by the campaign reached a total of £20,000. The direct losses of the settlers were estimated to amount to over £150,000.

Sir George Grey landed at Auckland on the 26th September, 1861, for a second time to undertake the government of the province, and on the 3rd October following Colonel Gore Browne left the colony.

The Stafford, or War Ministry, fell in the month of July, 1861, and was succeeded by the Fox, or Peace Ministry. Mr. Fox had been an officer in the Wakefield Land Company, and an ardent agitator for responsible government. He had long been an opponent of Governor Browne's native policy, and now threw in all his influence to aid the new viceroy in obtaining a peaceful settlement. Sir George Grey had a difficult task to perform, for he had not only to contend against the hostility of the Maoris, but also to placate the section of the white population who wished to crush native resistance by an aggressive war. For more than a year the Governor and Premier sought to obtain honourable conditions of peace, but, unfortunately, the Governor had been called in too late, and his "mana" had lost much of its old power. Early in the term of his second Government, Sir George Grey determined that the division of authority between the Governor and his Ministers should be swept away, and that upon native, as well as upon other affairs, the representative of the Queen should rely solely on the advice of his responsible Cabinet. On the 30th May, 1862, Imperial control over Maori legislation was finally abolished. Meanwhile, matters in the Waikato country were very unsettled, and a visit from the Governor had no appreciable effect. In 1863, the Governor left Auckland for Ngaruawahia, and, although he was well received by the Maoris, his announcement that a steamer was coming to trade on the Waikato River only seemed to increase the mistrust with which the natives regarded all advances made by the Government. The still unsettled Waitara land dispute was a constant source of irritation, and even the natives of the King country were divided on the matter. One party, led by Wiremu Tamihana Tarapipi, was in favour of a peaceful settlement, but Wiremu Kingi insisted on the retrocession of the Waitara land, and his cause was warmly espoused by Manga Rewi Maniopoto, chief of the Ngatimaniapoto nation. The Governor now caused the title to the land to be carefully examined, and came to the conclusion that it had never been lawfully acquired. In the meantime, a body of natives was in armed occupation of a block of land at Tataraimaka, near New Plymouth, which really belonged to the settlers, and the Maoris refused to leave it until the Waitara block was handed over. The claim of the colony to the Waitara land was removed by proclamation on the 11th May, 1863, but the restitution was somehow delayed, and the Ngatiruanui still refused to leave Tataraimaka. The Governor tried parleying, but without avail, and then resolved on decisive action. At the beginning of March, 1863, His Excellency, accompanied by General Cameron and a strong force of military, set out for Tataraimaka with the intention of re-capturing this block, besides settling the Waitara question. The natives accepted this move as a prelude to war, and Rewi and his supporters at once took action. The police-barracks and a newspaper office were seized, and the Resident Magistrate dismissed. Next, a party of soldiers was surprised and killed in the Taranaki district, and the prospect of peace became hopeless. In spite of the issue of the proclamation removing all claim to the disputed

land, and the withdrawal of the troops therefrom, war had re-commenced, and it dragged out its weary length over a period of three years. Sir George Grey had received notice that the Maoris intended to make an attack on Auckland, and resolved to forestall them. On the 12th July a small force under General Cameron occupied a position on the Koheroa heights, overlooking the Waikato River. The Maori force was in two divisions, one of which, under Manga Rewi Maniopoto, occupied the forest of Hunua, whence many successful attacks were delivered on the colonial levies. Wiremu Tamihana Tarapipi commanded the other division, which marched down by the course of the Waikato to oppose the invasion. On the 17th July, this force attacked an escort of the 18th Regiment, and defeated it, killing four and wounding ten. On the morning of the same day, the British troops at Koheroa defeated a Maori detachment. After another slight engagement Cameron concluded that his foes were of no mean calibre, and decided to make more formidable preparations. On the renewal of hostilities, a series of skirmishes culminated, on the 23rd October, 1863, in the action which has been called the "Battle of Bald Hills." During the progress of this conflict there were some desperate hand-to-hand encounters between the Maoris and the soldiers, but, eventually, the native force was driven back with a loss of thirty-two killed, while great numbers of their warriors were also wounded.

On the 30th October, General Cameron, who had been provided with two bullet-proof steamers, one of which was built in Sydney, proceeded to attack Meremere, but the Maoris evacuated this position, and retired to a stronger one at Rangiriri. Here, after a desperate resistance, they were forced to capitulate, but King Potatau the Second and his general Wiremu Tamihana Tarapipi made their escape. The Maori loss was between fifty and 150 killed, the number of wounded being unknown, while 183 were taken prisoners and sent to Auckland. The British loss was thirty-five men and two officers killed, and thirteen officers and eighty-five men wounded. It was now expected that peace would be proclaimed, and the enemy fell back from the King's head-quarters, and allowed General Cameron to occupy the position without a struggle. But the expected terms were not proclaimed, and the war was renewed. The Maoris were driven from one position to another, but eventually made a most heroic stand at Orakau. Here a force of about 300 natives under Rewi withstood for three days the attacks of a British army of 2,000 men. On the evening of the third day the Maori ammunition was exhausted, so the half-starving natives made a sortie, when the greater part of them were destroyed, but Rewi and a few followers escaped to the hills. The Maori loss was about 200, while the British casualties were sixteen killed and fifty-two wounded. With the reduction of Orakau, Maori resistance practically ceased, and Wiremu Tamihana and Rewi retired to the upper waters of the Waikato, whither they were not pursued. In this long and dilatory struggle, an able general and distinguished officers had been fighting with vastly superior

numbers a savage foe whose forces at the very highest estimate did not exceed 2,000, whereas General Cameron had ultimately under his control some 10,000 regulars, and he was assisted by volunteers and militia of about the same numerical strength. Nor was this their only advantage, for the British were armed with Enfield rifles and had artillery, while the Maoris possessed old Tower muskets and shot guns, and the few ship's guns they had could hardly be called artillery.

The campaign involved the colony in a debt of £3,000,000, besides Imperial claims incurred on account of military expenditure, while settlement and industry received a decided check. The conflict brought absolute ruin to the Ngatihaua nation, for nearly all their land was included in the scheme of general confiscation, while the Ngatimaniapoto race, which had practically provoked hostilities, lost very little territory. The new frontier was delimitated by a line drawn from Raglan on the West Coast through the plains of the Upper Waikato to Tauranga, and the lands confiscated by the Government were occupied by military and volunteer settlers. Like others of his race, Wiremu Tamihana Tarapipi died of consumption in December, 1866, a little over two years after the conclusion of the war.

Although peace once more reigned in the Waikato country, there was still disaffection in the Tauranga district. The natives in this locality, assisted by straggling parties of Waikatos, entrenched themselves in a strong position about three miles from Te Papa. Their stronghold, called the "Gate Pa," was effectively palisaded, and amply defended by rifle pits. Here a British force of 500 men attacked them, the defending Maoris, as usual, being much in the minority. Early in the siege a detachment attempted to storm the Maori citadel, but the attack was repulsed, and the British lost heavily. Shortly afterwards it was discovered that the natives had evacuated the "pa," escaping noiselessly under cover of darkness. In this affair the British casualties amounted to 111 killed and wounded, several of the latter subsequently dying, while the Maori loss was comparatively slight. The natives made their final stand at Te Ranga, about 3 miles inland from the "Gate Pa," and here they were completely crushed, their forces being almost annihilated.

In the meantime the second Taranaki war had been going on. Early in June, 1863, General Cameron successfully stormed a native stronghold on the Katikara River, some 15 miles from New Plymouth. In March, 1864, a force under Major Butler suffered a repulse before a "pa" at Kaitake. A more serious reverse to British arms occurred the following April, when detachments under the command of Captains Lloyd and Page were completely routed by the natives. When the bodies of the slain were recovered they were found to be stripped almost naked, and the heads had been severed from the bodies—an act of savagery hitherto foreign in the warfare between the two races. It was subsequently ascertained that this mutilation was due to the devotees of a new religion known as "Hau-Hauism," though in the

first instance it was called "Pai Marire" by its adherents. This creed originated in the disordered brain of a native named Te Ua, and was an unsavoury compound of Judaism, Christianity, and old Maori tradition. Amongst other strange things its votaries believed that their priests and prophets possessed superhuman powers, while invulnerability in battle could be secured by the utterance of the magic word "Hau," accompanied by mesmeric passes of the hand. The Hau-Haus decapitated their slain enemies, and used the heads to ornament a lofty pole known as the "niu," round which they were accustomed to dance, to the accompaniment of wild incantations. Early in April, 1864, they had an opportunity of a practical test of their boasted invulnerability in their attack on the redoubt at Sentry Hill, near New Plymouth. Here the Hau-Haus suffered a serious reverse, and had to fly for their lives, leaving thirty-four of their number dead or dying on the field. Notwithstanding this check, the peculiar superstition spread, and in the country round Wanganui, and on the East Coast, between the Bay of Plenty and Hawke Bay, the Hau-Haus proved particularly troublesome.

It was now fondly imagined by the colonists that with the clearing of the disaffected from the Waikato country, and the subjection of the Tauranga natives, the Maori "mana" had received such a blow that further resistance would be abandoned. However, the Hau-Hau superstition was responsible for a continuance of hostilities, and upon the New Zealand militia devolved the work of extirpating it, but most valuable assistance was given by Ropata Wahawaha, Major Kepa, Te Rangi-hiwi-nui, and other friendly chiefs. On one occasion the "friendlies" challenged the Hau-Haus to a pitched battle on the island of Moutua, where, after a desperate engagement, the Hau-Haus were signally defeated, their prophet, Matene, being amongst the slain. The Provincial Government of Wellington later on raised a monument to the memory of their brave allies who had fallen in the encounter. For the remainder of the year 1864 the colony enjoyed a comparative measure of repose, which was hardly interrupted by the escape of 214 Rangiriri and other prisoners from the island of Kawau, near Auckland, in the month of September. In November following the seat of Government was removed from Auckland to Wellington, in consequence of an agitation for a more central position from which to direct the affairs of the colony.

The year 1865 saw the resumption of hostilities on the West Coast. New Zealand at this time contained a very large and expensive Imperial military force, but the brunt of the war fell on the shoulders of the colonial militia, the friendly natives, and the adventurous spirits who came over from Sydney and Melbourne to take sides against a brave but ruthless foe. General Cameron's movements were painfully slow, and this fact, coupled with the tenacity with which he clung to the ocean beach, earned for him from the Maoris the epithet of the "Lame Seagull." Grey's impatience at the General's dilatoriness gave rise to

much acrimonious correspondence between the two chiefs. At length the Governor determined on the bold scheme of himself leading a force to attack the insurgents in a stronghold called the Wereroa "pa." On the 21st July, 1865, he successfully accomplished the reduction o this fastness, and about fifty Hau-Haus were taken prisoners. General Cameron resigned his command of the Imperial troops in the following month, and was succeeded by Major-General Trevor Chute. The Hau-Haus were still vigorous on the East Coast, where they committed several atrocious murders, mutilating the bodies of their victims. The great majority, however, of the Maoris were keenly shocked by these horrible acts, and Wiremu Tamihana Tarapipi wrote to Colonel Greer tendering his submission and that of the King Tawhiao. The campaign was now pushed on with much vigour. The conquest of the Opotiki district was completed, while the Waiapu expedition, under Majors Fraser and Biggs, supported by the friendly chiefs Ropata and Mokena, achieved signal success. The strong Hau-Hau fortress at Hungahungatoroa was reduced, and the insurgents were driven from the "pa" at Waerenga-a-hika. The campaign was brought to a close by a series of brilliant forced marches through the disturbed districts by Major-General Chute, the display of force causing a cessation of hostilities.

Grey's continual conflicts with the authorities rendered his position untenable, and in the month of November, 1866, he was succeeded in the administration by Sir George Ferguson Bowen. In the middle of 1868 the North Island was again convulsed in the turmoils of war by an outbreak of natives, led by Titokowaru, which resulted in what is known as the West Coast campaign. Meanwhile another Hau-Hau chief, named Te Kooti, escaped with a band of followers from Chatham Islands, and, landing near Gisborne, by his courage and ability soon found himself at the head of a considerable number of warriors. Titokowaru's band ravaged the Patea district. On the 12th July the garrison at Turuturumokai redoubt was defeated by the Maoris, and Captain Ross and nine men were killed. On the 21st August a British force under Colonel McDonnell attacked and captured the Hau-Hau stronghold at Te Ngutu-o-te-manu. Early in September Titokowaru signally defeated the Government forces at Ruaruru, killing nineteen and wounding twenty-five. Shortly afterwards the whites and "friendlies" were defeated at Moturoa. Titokowaru's "mana" was now in the ascendant, and he set forth on the road to Wanganui, carrying murder and rapine through the districts on his line of march. On the 9th November, 1868, Te Kooti and his band suddenly swooped down on the village of Matawhero. The Hau-Haus gave themselves up to indiscriminate butchery, twenty-nine Europeans and thirty-two friendly Maoris being cruelly murdered. When the news arrived the settlers fled in all directions. The women and children in Gisborne were shipped off to Auckland, and the deserted homesteads at Poverty Bay were given up to the flames by the savage Hau-Haus. Te Kooti and his band retired to the bush, to the hill of Ngatopa, murdering and pil-

laging on the way. In this stronghold he was attacked by a combined force of "friendlies" and whites under Ropata and Colonel Whitmore. The Hau-Haus found their position untenable, and during the night evacuated it and plunged into the forest. Thither they were pursued by Ropata and his followers, and numbers were killed or taken prisoners, but Te Kooti himself escaped. Meanwhile Kepa had rendered effective service in harrying the Hau-Haus under Titokowaru. Early in 1869 Lieutenant Gascoigne, his wife, three children and two other whites were murdered, and the Rev. John Whitely, arriving on the scene shortly afterwards, met the same fate from the hands of a band of Hau-Haus. Titokowaru was pursued by Colonel Whitmore and Kepa to the head of the Wanganui River, but he was allowed to remain there, as the authorities had decided on no further action. Te Kooti, however, continued to give trouble, and various punitive expeditions were despatched against him, but he was eventually left without further molestation, and the colony thenceforward enjoyed comparative peace.

In June, 1869, Mr. William Fox became Premier, having Mr. Vogel associated with him as Colonial Treasurer. The exhausting war had acutely injured the colony, and the strain upon its resources had been long and almost incessant. Mr. Vogel, in the Session of 1870, initiated a new policy, which he based on the belief that the native difficulty could be more readily combated by the construction of roads and railways, and by the augmentation of the British population through an influx of immigrants, rather than by the old methods of settlement and provincial government; and he maintained that the entire colony would be beneficially affected by the stimulating influence of the money borrowed to carry out the new policy. At this time the Constitution practically created by Sir George Grey in 1852, was still in operation, though not without occasional friction. Under this measure the colony was really a confederation of vestry-officered settlements—a system that worked fairly well under the conditions which had developed side by side with isolated coastal colonisation, undertaken by divergent interests. But its great troubles were questions of ways and means. The provinces had to rub along as best they could on the dribblets of revenue that might be spared by the Central Government; but, under the fearful exactions of an exhausting war, there was very little money to spare to furnish forth even dribblets of revenue. In order, therefore, to provide the needy provinces with a sure source from which to raise funds, they had, from their initiation, been given the virtual control of the Crown lands within their borders, and the profits accruing therefrom. Of course, here was an inequality of endowment that led to innumerable jealousies and much heart-burning. In the South Island, save in Maori-afflicted Nelson, land was high-priced; in the war-torn North Island, low-priced; and the revenues of the various provincial districts were relatively large or meagre, according to geographical situation. Already, in 1870, the Central Government and the Provincial Government owed something like

£7,250,000 between them. In the case of the former a large amount of money consisted of a war debt; but the Provinces had, at any rate, expended a great deal—especially in Canterbury and Otago—on public works, and in rendering efficient their system of colonisation. Sir Julius Vogel came forward with a proposition to centralise expenditure on a vast and continuous scheme of public works and immigration with the aid of borrowed money. His scheme for borrowing from six to ten millions of money to be expended on defence, immigration, roads, railways, the purchase and settlement of land, and public works generally, was almost unanimously adopted, and the colony entered upon its new financial career with hardly a dissentient voice. The Provinces did not, however, with wisdom equal to that of its suggester, adopt also the saving clause of his great policy, to wit: that the cost of railways should be recouped from a public estate created out of the Crown lands through which the lines should pass. Here selfishness of a provincial type stepped in. It enabled the Provinces to retain their control of Crown lands for another five years; but it crippled the public works policy of Vogel, and made its originator a determined opponent of Provincial Government—which he overthrew some five or six years later with the help of the immigrants who were, as one result of his policy, pouring into the country in their hundreds, and who ridiculed the idea that a country containing some five hundred thousand inhabitants, should require nine governments in addition to its general Assembly, when the mighty nation that they had just left could manage much more efficiently with only one. Mr. Vogel's policy, however, certainly worked wonders. At the end of the year 1870 New Zealand contained a white population of 248,000, a number representing a threefold increase since the beginning of the Taranaki war, in 1860. The revenue at that date was £464,000; during the succeeding ten years it had expanded to £1,384,000. Exports and imports showed a corresponding increment; and land under cultivation, sheep and horned cattle, had increased seven-fold. From the initiation of the Vogel proposals, and their acceptance by the General Assembly in August, 1870, to October, 1877, the administration remained in the hands of the same party, though with seven different Ministerial combinations, which occasioned a nominal, though not a real change, in the successive Governments. During this period the following facts are noteworthy:—In 1870 the public debt amounted to £7,840,000, or some £31 per white inhabitant; in 1877 it had risen to £20,700,000, or £50 per white inhabitant; but the borrowed money had, among other things, enabled the Government to construct over a thousand miles of railway, besides introducing, by State aid, thousands of immigrants, though many came to the colony without such assistance.

In the meantime quietness reigned in the native districts; the price of wool had risen; gold was being discovered right and left; and the colony was advancing with rapid strides. The Maori troubles, too, were all but over. For three years Te Kooti had been a hunted

fugitive. In the year 1870 the chase was left almost exclusively to the natives themselves, under Ropata, Topia, Henare Tomoana, and Kepa Te Rangi-hiwi-nui. Ropata and Major Kemp (Kepa) drove him from district to district backwards and forwards, across and across the island. Again and again he escaped, and again and again the hue and cry was raised at his heels. He fled through the country lying behind the Bay of Plenty to the almost impenetrable forests south of Opotiki, where his "pa" of Maraetahi was besieged in March, 1870, by 400 friendlies under Kepa, Topia, and Wi Kingi. After a desperate action, in which the arch-rebel escaped barely with his life, his assailants captured his stronghold, recovered 218 of his captives, and took prisoners thirty-five men and seventy-six women and children. Of his followers eighteen were killed. Te Kooti tirelessly, vengefully pursued, now crept, now crawled, now feverishly raced, from lair to lair in the solitude of the forest or in the mountain fastnesses with a little band of some score adherents, every party he got together being successively scattered. His wife was captured. He was himself shot in the hand. Often and often were his hunters within a few yards of their quarry. In his wild flight from justice and vengeance he was forced to scale snow-clad mountains, to wade the frozen waters of torrents that swept the gorges, to carve and slash a pathway through the tangled growth of the living jungle. But it seemed that he bore a charmed life; he always evaded the supreme humiliation of capture. In the wild territory of the savage Uriweri tribes Te Kooti lost his equally bloodthirsty companion, Kereopa—the murderer and mutilator of the Rev. S. C. Volkner, done to death by the fanatical Hau-Haus at Opotiki. Kereopa, when captured, was most unceremoniously hanged, and the Lutheran missionary, in some small manner, avenged. Emaciated with hunger, feverish with thirst, worn out through want of sleep for fear of capture while he rested, in hourly terror of his indefatigable foe, Ropata, and left with hardly a single follower, Te Kooti betook himself, as a last refuge, to the King country, and there found sanctuary in 1872. He was eventually pardoned, and for some twenty years lived a quiet life, after the hunters had abandoned the chase, dying in peace, if not in sanctity. He often expressed a wish to visit Poverty Bay, the scene of his chief atrocity; but the stern hostility of the settlers caused the Government to prevent his doing so.

The chief interests of the wars between the two races, now brought to a termination by Te Kooti's absolute suppression as a factor in rebellion, lies not in the numerical importance of the men engaged in them, so much as in their racial significance, individual heroism, and the peculiar picturesqueness of the arena of conflict. It is, perhaps, true, that there is something surprising in the fact that mobs of ill-armed and partially-disciplined savages, often outnumbered by three and four to one, sometimes by as many as ten to one, met and repeatedly defeated army corps of the best armed, best drilled, and best disciplined soldiers of Europe; but it must be remembered that the tactics observed

in Maori warfare puzzled and baffled soldiers accustomed to march in column and to charge in line, and that the New Zealand natives were, at least, masters in the art of fortification. One who has given the subject no small attention considers that out of the many engagements which took place between the years 1843 and 1870 (excluding the massacre at Poverty Bay) thirty-seven may be classed as of the first importance. Out of these the British arms sustained defeat of unmistakable character nine times; while the tenth encounter, that of Okaihau, was indecisive. Of twenty-seven victories, those of Rangiriri and Orakau were dearly won. In the double fight at Nukumaru the loss of the British was greater than that of the enemy, and in the assault on the "pa" of Waireka Hill most of the troops had retreated, and heard of the British success only from a distance. Six of the successes were wholly, or nearly wholly, the work of Maori auxiliaries. For the ten years, 1860-70, the cost in lives to the British may be estimated at 800; to the defeated Maoris at 1,800. There were besides, on both sides, thousands of wounded—very many British—and numerous deaths from the attendant horrors of warfare, such as disease, overcrowding, exposure, hardships and famine.

The native difficulty was, however, melting away with a rapid disappearance of the natives themselves. In 1869 the Maori affairs passed into the hands of a really capable Minister for Native Affairs, the Hon. (afterwards Sir) Donald McLean, who, from the beginning of 1869 to the end of 1876, took the almost absolute control of the Government policy in its dealings with and directions of Maori questions. To the great influence of this man with the "friendlies," the colonists largely owed the Maori aid, so actively exercised against Te Kooti in the suppression of the Hau-Hau fanatics. But McLean made his real mark, not as a Minister for War, but as a man who placed a permanent and lasting peace between the two races on a true basis. For native service he paid liberally by skilful and profitable land purchase, by paying the respect which their position demanded to the chiefs, and by tact with the people and easy indulgence of their childishness. The wild Ureweris and touchy natives of the interior of the King country he did not molest. Elsewhere his influence was all predominant, and by his excellent management the Maoris, after the war, proved fairly amenable to civilised usage and British legal methods.

The numerous gold discoveries which had been made were not without a decided influence upon the new era of prosperity opening before the Colony. In 1861 gold had been discovered in the provincial district of Otago, at a time (the period of the Waitara war) when the European population did not number more than some 80,000. But rumours of the presence of the precious metal in the mountains and gullies of the South Island had long been persistent. From 1857 to 1860 some £150,000 worth had been won in the province of Nelson. In the winter of 1861 Gabriel Read, while prospecting in a gully at Taupeka, discovered convincing evidence of a good alluvial field, and dug out

with a common butcher's knife, in the space of ten hours, about £25 worth. After sinking hole after hole, for some distance along the line of his discovery, and striking "finds" of gold in all, Read wrote to Sir John Richardson, the Superintendent of the province, and apprised him of his success. For this he was afterwards paid a reward of £1,000. Upon receipt of the news, half the population of Dunedin dashed away to the scene of the "rush." For some years following, the province of Otago became the theatre of "rush" upon "rush," though the physical characteristics of this part of South Island rendered travelling of any kind a matter of the greatest difficulty. The mountains were bleak and treeless, and the obtaining of fuel an impossibility. Nevertheless, thousands poured into the province, though the snows and famine of the winter months drove not a few back again to the warmer coast. In 1863 the export of gold from the Otago fields had risen to more than £2,000,000 worth.

The fields of Otago were in the full tide of their fame and attractiveness when rich "finds" were reported in the west coast districts of the province of Canterbury. Gold had long been known to exist in the wild gorges and well nigh impassable river-beds of this romantic and impenetrable region, but the difficulties of winning it were great indeed. Government surveyors who had been sent to explore the country for the precious metal had more than once been drowned in the ice-cold mountain streams, or had returned to the settlements worn out and famished. In 1864 a man named Albert Hunt had found payable gold in the Greenstone Creek. He was subsequently branded as an imposter, and compelled to fly for his life by a mob of disappointed and maddened diggers. Nevertheless, after events proved the truth of his story. In 1865 hundreds of diggers flocked to the province of Westland, and, braving incredible difficulties, and suffering hardships innumerable, penetrated to every gold-bearing spot on the West Coast. Many lives were lost, but still the quest went on. Much gold was won, and as freely spent. Provisions fetched astonishing prices. For a ton of flour £150 had been paid, and candles were considered cheap at a shilling each. For years, however, returns were so good that £10 per week was regarded as only a fair outlay for the most primitive of food and necessaries. The gold exported from the West Coast of the South Island in 1866 was valued at £2,140,000.

Quickly on the heels of rich "finds" in the southern provinces of Nelson, Otago, Canterbury and Westland, came news of magnificent discoveries at the Thames and in the Coromandel Peninsula, situated on the east coast, in the province of Auckland. They were not alluvial goldfields, but quartz reefs, and thus differed from the workings in the South Island. The exploitation of the auriferous deposits of the Auckland province was long delayed by the successive wars between the settlers and the natives. When such exploitation became possible, the ground-landlords rendered profitable mining problematical by insisting upon high-priced prospecting permits; and it cost the miners as much

as £1 per man for the right to seek for gold whose existence was merely guessed at. This short-sighted policy put off the opening up of the Ohinemuri Gold-field until 1875, though years before this the shores of the Hauraki Gulf had been worked with system and profit. The gold fields of New Zealand are, however, no longer exploited by individual effort. To-day so many costly scientific and mechanical processes are called into requisition to win the precious metal from its matrix, that capital is required and the combined effort of companies necessitated. The approximate gold yield of the Colony up to date is set down at the value of £54,500,000.

One singular and noteworthy characteristic of the gold-fever days in New Zealand was the orderly and law-abiding manner in which the search for the precious metal was conducted. There was little extravagance or excess, few riots—such dual encounters only as are common in any collection of adventurous spirits—and but one gang of bushrangers —the Burgess gang.

Besides gold, New Zealand possesses many valuable minerals, though the most curious of these is undoubtedly kauri gum, of which over £9,000,000 worth has been raised in the Colony since 1853. It was, however, worked long before by the Maoris, who found it more profitable to collect kauri gum than to engage in the wars of Hone Heke against British supremacy. At the present time there are about 7,000 Europeans and Maoris engaged in gum-digging, of whom some 1,500 are Austrians from Dalmatia.

Sir George Ferguson Bowen's term of office as Governor of New Zealand extended from the 5th February, 1868, to the 19th March, 1873. He was succeeded by Sir George Alfred Arney, the Chief Justice of the Colony, as Administrator from the 21st March to the 14th June of the same year, pending the arrival of Governor Bowen's successor, Sir James Fergusson, Bart., P.C., who was just fresh, as in the case of Sir George Grey, from the Governorship of South Australia. Sir James Fergusson governed the Colony of New Zealand from the 14th June, 1873, to the 3rd December, 1874, when he in turn gave place to the Marquis of Normanby.

In the meantime affairs political were culminating towards the accomplishment of Vogel's dream—namely, the abolition of the Provincial Governments and the control of the Crown lands by the Central Parliament. The Colony was at rest, good prices prevailed, much gold was won, and landed estate advanced rapidly in value. Especially was the last-mentioned condition of prosperity the case in the province of Canterbury, where the system of free selection without limitation of area or occupation attracted the speculative buyers. A "boom" in Canterbury lands set in, and hundreds of thousands of acres were bought from the Provincial Government at the fixed price of £2 per acre, and resold at, or held for, a rise.

The revenue of the Provincial Council was greater than it knew how to expend, even extravagantly. Vogel saw his opportunity, and

appealed to the old Centralist Party to crush the provinces; but the provinces, particularly Otago and Auckland, resolved to make a strong fight for their old autonomy. In the pleasant islet of Kawau, near the city of Auckland, quietly resided Sir George Grey, deep in the study of Maori traditions and antiquities. Now, the old Constitution that Vogel sought to destroy had been practically Grey's creation, and he burned with indignation in the solitude of his island retreat that sacrilegious hands should be laid upon the instrument by which he had made New Zealand a nation. Forth he came from his studies in 1875, and entered the arena of politics. With wonderful vigour he threw himself into the conflict, mounted the public platform, and spoke with an eloquence that took his hearers by storm. They heard him with admiration, largely mixed with surprise, as no one had hitherto suspected the orator and the poet in the able explorer, the shrewd statesman, diplomatist, and soldier. The fight was vehement on both sides. The Centralists were led by Major Harry Atkinson, who had won a high place in public esteem as an officer of bush fighters in the many wars with rebel Maoris, and who had greatly distinguished himself on several occasions at Taranaki. He leapt at once to the command of his party. Under his leadership the Provincialists were beaten, the Crown lands passed under the control of the Central Government, and the functions of the Provincial Councils were handed over to Local Boards and organisations.

Julius Vogel left the Colony in 1876, and in the month of October, in the year following, Sir George Grey succeeded in ousting an administration led by Major Harry Atkinson, which had earned for itself the title of "Continuous." The new Premier formed a Ministry mainly composed of young men of great ability; and appealed for the first time to the democracy of the Colony from a platform deliberately advanced and, for the period, essentially socialistic. At this time, and on every available opportunity afterwards, he advocated triennial Parliaments, the principle of one man one vote, a direct land tax, and a land policy based upon Crown leases rather than upon Crown sales, and having especial regard to the restriction of the area that any one man might require. He was, indeed, the direct forerunner of John Ballance; but though he won office on the strength of his policy, he could not carry it into law. Among his colleagues was John Sheehan, Minister of Justice and for Native Affairs, the first of native-born whites elected a representative of the people to the Parliament of New Zealand. Sir George Grey's Ministry was not of long duration, nor was it especially brilliant. It ended its career, at the early age of two years, in 1879, its chief being deposed from the leadership of his party by his own followers. One of the causes of the collapse of the Grey Ministry was a financial depression which visited the Colony at about this time. Prices fell all round, especially of wool and wheat; and the output of gold failed to keep up to the average of former years. There had, too, been a mad rush for land investments; much money had been borrowed to acquire estate, and to establish speculative businesses; and there was now a

strong reaction in prices. The increasing financial tension brought to the ground many a business house of apparent commercial solidity, and it was not before 1894 that things took a genuine turn for the better. It is noteworthy of Sir George Grey's democratic programme that, though he himself failed to carry any one of his favoured propositions into law, he had the satisfaction of seeing them all placed upon the Statute Book (some by his friends, some by his opponents) save one, —the election, by the people, of the Governor of the Colony.

A feature of New Zealand politics was the long existence enjoyed by what has been termed the "Continuous Ministry." It came into office about the year 1869, and may be said to have ceased in the month of January, 1891. Out of a period of twenty-one and a half years it held office for some sixteen or seventeen. Sir Edward Stafford turned it out, but for a month only, in 1872; Sir George Grey for two years, 1877-9; Sir Robert Stout for three years, 1884-7. The "Continuous Ministry" represented a shifting series of combinations of politicians by which the Cabinet was modified, every now and again, without ever being intrinsically changed. It came into being under Sir William Fox, with provincial and mildly democratic sympathies. It quarrelled with the provinces, and killed them; and then it became conservative—of the New Zealand type of conservatism. Its leaders were Fox, Vogel, and McLean—1869-72; Fox left it in 1872; Major Atkinson joined it in 1874; Vogel left it in 1876; McLean died in 1877; put out of office by Sir George Grey, it was once more led, for a short time, by Sir William Fox; it came back to power in 1879 as a Hall-Atkinson-Whitaker combination; Hall retired in 1881, but Atkinson and Whitaker continued to direct it to the end. There is another thing to be noticed in connection with the Parliament of New Zealand. For about three decades the Maoris have sent four members of their own race to the House. When speaking they ordinarily use an interpreter; despite which, when discussing affairs concerning their own country-men, they often display great fluency and become really eloquent.

In the year 1864 the Government had confiscated more land than the settlers could then utilise, and a portion of the alienated territory remained unoccupied. In the province of Taranaki, the unoccupied land fell into the possession of its original Maori owners, who built houses, cultivated farms, and exercised all the other rights of ownership thereon. A promise had also been given to the natives of Taranaki that the Government would give them a certain sum per acre as a solatium for the confiscation of their lands. Time passed on, the occupiers remaining undisturbed, and actual ownership and exclusive possession were at times somewhat offensively asserted. Moreover, religious fanaticism gave cohesion to the Maoris who occupied the confiscated lands and caused them to gain adherents from many places until a large settlement became established in the Ngatiruanui country, at a place called Parihaka, under the leadership of a Maori prophet or soothsayer named Te Whiti. For some time it appeared as if the

disposal of the disputed lands would result in another outbreak of war, but the decisive action of Mr. Bryce, Minister for Native Affairs, averted such a contingency. At the head of a force of armed constabulary, Mr. Bryce proceeded to Parihaka, where Te Whiti and Tohu allowed themselves to be quietly arrested. They were detained in custody until March, 1883, when they were taken back and placed on the reserves measured out for Maori occupation. Since then the natives have either become reconciled to dominance by the whites, or lack the power and desire to organise further resistance. At the time of the signing of the Treaty of Waitangi the Maoris may have numbered 70,000; at the census of 1858 the returns gave 56,049; at that of 1886 (including half-castes) 41,627; while at the census of 1891 the number was returned as 41,993.

During the period occupied by the foregoing political and social events, the colony had several times changed her government. The Marquis of Normanby surrendered the reins of office on the 21st February, 1879. The government was then administered by Chief Justice James Prendergast, till the arrival of Sir Hercules G. R. Robinson, who ruled the colony from the 27th March, 1879, till the 8th September, 1880. During his régime, in the year 1876, Rewi, the hero of Orakau, visited Auckland for the first time in twenty years, and was lionised by the citizens. He returned to the Waikato in company with the Governor, Sir Hercules Robinson, deeply impressed by the marvels wrought by the all-subduing "pakeha." On the retirement of Sir Hercules Robinson, on the 8th September, 1880, Chief Justice Prendergast again administered the Government. He was relieved of his post by the Hon. Sir Arthur H. Gordon, who was Governor of the colony from the 29th November, 1880, to the 23rd June, 1882; when Chief Justice Prendergast, for a third time, administered the Government till the coming of Lieutenant-General Sir William F. D. Jervois, on the 20th January, 1883. It was during Sir Arthur Gordon's Governorship, early in the year 1882, that Tawhiao, the "King of the Maoris," came forth from his long seclusion and visited Auckland, where all sorts of honours were lavished upon him. He subsequently visited England, and then returned to his home on the Waikato, where he lived quietly for several years. At the beginning of 1888, Tawhiao held a meeting at Maungakawa, at the invitation of the Ngatihaua tribe, when the following lines of policy were affirmed: "That the Maoris and pakehas shall be as one people; obey the laws of the Queen, and respect them in every way as loyal subjects; and, that every native acting contrary to the Queen's laws shall undergo the same punishment as the 'pakeha'; that all natives avoid intoxication and other abuses; that no objection be offered to the Lands Court selling, or otherwise, so long as it is done legally." With this declaration the long dispute between the two races, which lasted from the very beginning of colonisation, may be said to have come to a conclusion.

Legislatively New Zealand has been a country of experiments. As far back as the year 1869 an Act was passed enabling the Government to grant life assurances and annuities on the security of the Colonial revenue ; and the Government Insurance Department is now a prominent institution of the State. In 1873 a Public Trust Office was founded, by which it was sought to insure the faithful discharge of trusts, to relieve individuals from the responsibilities of trusteeship, and to substitute a permanent officer of the Civil Service in place of guardians. Notwithstanding the lavishness of its public works policy, the Government of the colony always manifested a reluctance to divert any of its revenues from the ordinary channels of public expenditure to any costly schemes of coastal defence. New Zealand was more backward in this respect than any of her sister Australian colonies. It is, perhaps, largely due to the exertions of one of the Colony's Governors, Sir William F. D. Jervois, that much was done to remedy this condition of things. Soon after his arrival in the colony, in January, 1883, His Excellency made a tour of inspection of the coastal defences, with a view to the elaboration of a homogeneous scheme. He subsequently, by lectures and by personal influence aroused public attention to the risk which the colony would run in the event of a European war, and under his direction the chief ports have been strongly fortified and furnished with effective battery and torpedo defences. As a direct result of the native wars, there is, and has always been, a large military element in the population ; and New Zealand is now one of the best equipped of the Australasian colonies, either for putting down an insurrection that might arise within its own borders, or for repelling an attack from a foreign enemy.

The period marked by the Governorship of Sir William F. D. Jervois was probably the worst, in a financial sense, that the Colony had hitherto seen. Prices of staple produce continued to fall year after year. Those who had purchased landed estate with borrowed money for a speculative rise, one after another failed ; next came the turn of their mortgagees, and then that of the minor financial companies, whose speculative holdings were unsaleable, and whose funds were exhausted. All this disaster was placed on the shoulders of the Vogel policy of public works and internal expansion ; but it was really due to several other causes. The truth is, that it was the private indebtedness of individuals at a time of slump after a period of inflation of values, together with an appalling fall in the price of raw products, rather than the spending of borrowed money on reproductive works, that plunged the Colony so long and so deeply in the mire of financial difficulties.

Political life during this period became chiefly the history of a series of expedients for keeping the Treasury from absolute depletion, and carrying on the settlement of the land. The industrial outlook in New Zealand was probably never worse than in the years 1885 and 1886. The policy of retrenchment had been tried before with some results of partial salvation. It was tried again. The salaries of the Governor

and the Ministers were diminished, as also were the size and the pay of the House of Representatives; the Customs duties were raised, and the taxes on property were increased. The result of these exertions to restore financial balance was a measure of strained but solvent success, and is creditable to the Hall, Atkinson, and Whitaker Ministry, which was called upon to meet the emergency.

While the provinces had their own Governments, they had also their own Land Laws. With these the General Assembly of the colony had little to do. With the abolition of the provinces, the management of the public lands came into the domain of the central parliament, and some fifty-four divergent statutes and ordinances had to be repealed. Uniformity could not, of course, be at once secured, as land was under occupation under nine different systems, as representing the methods of dealing with the public estate by nine different Provincial Councils. Gradually these various regulations were brought together in a coherent whole; but it was not before the year 1892 that one Land Act contained the law on the subject, and could be made equally applicable to the whole of New Zealand. According to the Statute Books of 1877 to 1887, the land was the thing of first importance engaging the attention of New Zealand politicians. It was the one central question, complicated with the claims of native ownership thereto, first-comer settler's ownership, colonising companies' ownership, and Government and provincial ownership—ownership by fraud, by conquest, by purchase, and by confiscation.

One of Sir George Grey's favourite projects was the re-purchase by the State of private lands, with or without the owner's consent. Sir George Grey did not remain in public life long enough to see it become law; and keen has been the fighting over this principle. But Mr John McKenzie, one of the most masterful and resolute of the Ministers of Lands put in power by the Liberal Party, carried it into law, and administered it with a strenuous ability, which constitutes an effective example to succeeding holders of his portfolio. Under this law £700,000 has been spent in buying forty-nine estates, or portions of estates, for closer settlement. The area bought was 187,000 acres. Some of the purchases have not yet been assigned to occupation. On the rest, 2,300 persons have been settled, paying a rental which represents 5·2 per cent. on the cost of the land to the Government; while 700 new houses have been built, and some £100,000 expended in improvements.

In 1886 the Hon. John Ballance held the portfolio of Minister of Lands. The period was one of intense financial depression, and hundreds of unemployed artisans and labourers wandered about the country, in a state bordering on famine, looking for work. Then it was that this most radical of all New Zealand's statesmen made a courageous attempt to solve the unemployed difficulty by placing the workless upon the soil, and making of them producers. Blocks of Crown land were taken up in various parts of the colony. These were divided into allotments of from 20 to 30 acres, and let to the village settlers on perpetual lease at

a rental equal to 5 per cent. on the prairie value of the lands. Some of these experimental farms collapsed, others succeeded. According to latest reports, the village settlers and their families occupy about 35,000 acres, in allotments of an average size of about 24 acres. About £27,000 has been advanced them by the Government, of which sum they have returned some £3,000. The Government has, however, been paid £27,000 in rent and interest, and the improvements made by the settlers on their allotments are valued at about £110,000.

Sir William F. D. Jervois' term of office ended on March 22nd, 1889, and the Chief Justice, Sir James Prendergast, was thereupon called to the post of Administrator till the 2nd May of the same year, when the Earl of Onslow arrived to take up the reins of Government. It was during the last-named gentleman's term of office that the disruption of the "Continuous Ministry" (representing the Conservatives) was accomplished, partly by radical persistence in attack, and partly by internal disaffection. Sir Frederick Whitaker was fast sinking under advancing years, Sir John Hall was too ill to take office; and then fell the greatest blow of all—Sir Harry Atkinson the fighting leader died suddenly in harness in the Legislative Council in 1892.

The Earl of Onslow resigned his office on the 24th February, 1892, and the post of Administrator of the Colony, was again discharged by Chief Justice Prendergast until the arrival of the Earl of Glasgow, who assumed the duties of Governor on the 7th June, 1892. During the year 1893, the Liberal Party became disrupted on the liquor question, the opposing factions ranging themselves under the respective leaderships of Mr. Seddon and Sir Robert Stout. A duel between these gentlemen then ensued, but was ended by the retirement from public life of Sir Robert Stout in 1898. The liquor question, indeed, had the effect of strangely complicating political matters in New Zealand—and is, moreover, doing so at the present time. In 1893, the prohibitionist party, led by Sir Robert Stout, and organised outside the House by two clergymen named Isitt and Walker, thought the time opportune to press their demands to the uttermost. John Ballance, the Premier was just dead, and his party, on the eve of a general election, was supposed to be moribund. The Ministry tried a measure of progressive legislation, and sacrificed all their enactments—land, labour, and otherwise—excepting the Female Franchise Bill, to the exigencies of the situation, and passed a Local Option Bill. This hasty measure was of a purely tentative character, and had to be expanded and amended in 1895 and 1896. It is admitted that, as it now stands, though it may not give the most ardent of the prohibitionists satisfaction, it nevertheless embraces a complete and elaborate system of local option. Publicans' licenses fall-in with the death of the triennial parliaments of the colony; and the licensing poll takes place on the same day as the general elections, at which every male and female over the age of 21 may vote. The licensing districts occupy the same areas as the electoral districts, and the poll decides, by a majority of votes in

each district, to retain all existing licenses, to reduce their number, or to abolish them altogether; but in order to carry the article of total abolition of licenses in any electoral and licensing district, a majority of three to two is necessary. The Act does not provide for compensation. Two local option polls have been held under the measure, the first resulting in the closing of about seventy houses, and in totally prohibiting the retail of liquor in the Clutha district. The second general licensing poll was held in December, 1896, when, for the first time, it was taken on the same day as the parliamentary elections, and, as a consequence, the prohibitionist vote was nearly doubled. The result, however, was unexpected. The prohibitionists were everywhere defeated, except in the Clutha district, by the moderate party.

During the Earl of Onslow's administration, about the year 1890, the organised Labour Party made an assault on the political citadel and practically carried it by storm. New Zealand had passed through the old days of pioneering, whaling, sealing, alluvial gold-digging, native warfare, and mammoth pastoral enterprise, when acres were many and men were few. A new civilisation had grown up, fashioned on old-world lines, and ripe with a heavy harvest of old-world troubles. The colony had entered upon a commercial and industrial period, with an ever-present labour trouble, unorganised at first, and inarticulate, but rapidly organising and learning the alphabet of its power. When the organisation was complete, the Labour movement found its voice, and sought to make it heard in the councils of the State. The gold was gone, and the lands were all occupied, and the pressure of new conditions forced into prominence the new factor in politics. Somewhere about this time occurred two great strikes—one in England, thousands of miles distant; the other in Australia, in the very heart of the Newer World. One was the London dockers' strike; the other the great maritime strike of 1890. Smarting under the rebuff that it met with in Australia all along the line, the baffled cause of labour sought redress for its wrongs in Parliament. In none of the Australasian Colonies was the new movement so vehement as in New Zealand. The way, however, had been prepared. The voice of Grey had long been lifted in advocacy of measures deemed by opponents as ultra-democratic. The new Labour movement entered politics, and fell into line with the existing Liberal Party, and the coalition was strong enough to indulge in legislation denounced by conservatism as the wildest experimentalising. The State was a landlord already, a great owner of property, a large employer of labour. The new legislation embraced eagerly the theory of practically-applied socialism, and extended the functions of the State.

It is said that the Opposition of 1889-90, though containing some conservative elements, was on the whole radical, and had always supported Sir George Grey in his efforts to widen the franchise—efforts which, in 1889, were finally successful in obtaining the one-man-one-vote principle of Parliamentary election. In the year 1889 John

Ballance was the head of the Opposition in Parliament. This man, who may fairly lay claim to the title of statesman, was by profession a journalist; but he had sprung from the people, and knew their needs and their weaknesses, their strength, and their ways of life and methods of thought. On the 24th January, 1891, John Ballance took office as Premier, though the elections (which in New Zealand take place on one day) had already pronounced their verdict on the 5th December of the preceding year.

The legislation initiated by Ballance, and continued by the Seddon Ministries (in reality they are but one Administration), during the past eight years or so, may be divided into enactments relating to Finance, to Constitutional Reform, and to Labour. The principal source of direct taxation was the Property Tax. It consisted of a penny in the £ on the capital value of every citizen's possessions, less his debts and exemption of £500; and was a rough-and-ready method of raising revenue. It was, however, inequitable, as it taxed stock that was frequently unmarketable—an exaction that fell upon values—while incomes, as such, were untouched. Moreover, years of high returns and loss were treated alike. The tax did not discriminate between good seasons and bad, and Ballance determined to introduce a more equitable system of revenue-raising.

The Property Tax was abolished, and its place taken by a progressive Land Tax and a progressive Income Tax. These passed both Houses after a bitter conflict; and a light Absentee Tax also became law. Land is not encumbered with an Income Tax, and holders of less than £500 worth of bare land value pay no Land Tax. On all land above that value 1d. in the £ is paid, less amount of mortgage, the tax in respect of which is paid by the advancer of the loan. An additional graduated tax begins on holdings worth £5,000—at that stage it is $\frac{1}{8}$d. The tax rises by progressive steps till, on estates assessed at £210,000, it is 2d. in the £. Thus, under the graduated and simple Land Tax together, the holders of the largest areas pay 3d. in the £; while the small farmer, whose holding is worth less than £500, pays nothing. The graduated tax brings in about £80,000 per annum; the 1d. in the £ Land Tax about £200,000; and the Income Tax about £70,000. The earners of incomes less than £300 per annum pay nothing. Between £300 and £1,300 the tax is 6d. all round; over the latter sum it rises to a shilling. Joint Stock Companies pay a shilling on all income. Another law authorises local governing bodies to levy their rates on bare land values. The Bill passed the House of Representatives three times, and was three times rejected by the Legislative Council. It became law in 1896. The adoption of the principle permitted by it is hedged about by various restrictions, but some fourteen local bodies have voted in its favour. A Bill that found much favour with the local small farmer is the Advances to Settlers Act of 1894. Under it a State Board may lend Government money on leasehold and freehold security, but not on urban or suburban lands, unless occupied for

farming or market gardening. The loan may amount to three-fifths of the value of the security when freehold, and one-half when leasehold. The rate of interest charged is 5 per cent., but the borrower pays at the rate of 6 per cent., in half-yearly instalments, the extra 1 per cent. being by way of gradual repayment of the principal. Mortgagees must in this manner repay the principal in seventy-three half-yearly instalments; if able to pay sooner they can do so. About a million of money has been lent under the Act.

The Legislative Council of New Zealand is nominated, not elective, and there is no fixed limit to the number of members. Prior to 1891 the nominations were for life. At that time, however, the period of tenure of a seat in the Upper Chamber was reduced to seven years. It was found, also, that the Liberal Party was almost altogether unrepresented in the Council; so, in 1892, Ballance requested the Governor, the Earl of Onslow, to call twelve fresh councillors. His Excellency demurred at the number. There was then about to be a change of Governors, and the matter remained in abeyance. On the 7th June, 1892, the Earl of Glasgow assumed the governorship; but he proved as obdurate with regard to the fresh appointments as did his predecessor. Ballance insisted that it was the Governor's duty to accept the advice of his responsible ministers in this as well as in other affairs. His Excellency did not think so. The matter was then, by mutual consent, referred to the Colonial Office, and Lord Ripon decided in favour of the Premier. Twelve new councillors were accordingly nominated. The submission of this question to the arbitration of Downing-street was attacked by the Conservatives. It was attacked also by Sir George Grey, the democrat; but it was highly approved of by the House of Representatives, and by the people generally.

A measure that Ballance had much at heart was the carrying into law of the principle of one man one vote. He did not live to see it passed. During his lifetime his Electoral Bill was thrown out twice by the Council, and went through only some months after his death. Under this Act, one man has not only one vote, but only one registration; he cannot have his name upon more than one roll. The right to vote by letter was conferred upon shearers, as it had been previously conferred upon seamen; and the franchise was extended to women. This article of the Electoral Bill passed by the narrowest majority on the eve of the general elections. There was a rush of women to be put on the rolls—and then the unexpected happened: they did not vote solidly on a conservative ticket; their vote, on the contrary, buttressed the position of the Liberal Party in power.

The Labour Laws of New Zealand are twenty-six in number, and comprise Acts, amended Acts, and portions of Acts. Some twenty of these laws have been passed during the last seven years. One of these, the Employers' Liability Act, worked in conjunction with a law for the inspection of machinery and a thorough-going system of factory inspection, has lessened accidents without leading to litigation. A

Truck Act declares the right of every wage-earner to be paid promptly, in full, in current coin, and to have an individual choice in the expenditure of wages. Two more enactments deal with the earnings of the workmen of contractors and sub-contractors, make them a first charge on all contract money, give workers employed on works of construction a lien thereon, and compel a contractor's employer to hold back at least one-fourth of the contract money for a month after the completion of a contract, unless he shall be satisfied that all workmen employed have been paid in full. A Wage Attachment Act limits, without entirely abolishing, a creditor's right to obtain orders of court attaching forthcoming earnings. The Factories Act of 1894, slightly extended by an amending Act in 1896, consolidates and improves upon no less than four previous measures, two of which have been passed by the Ballance Government. Under this Act all workshops, where two or more persons are occupied, are declared to be factories, must register, pay an annual fee, and submit to inspection at any hour of the night or day; a master and servant working together count as two hands, and inspectors have absolute power to demand such cubic space, ventilation and sanitary arrangements generally as they may consider needful to preserve life and health. The factory age is 14; there are no half-timers. In New Zealand, primary education is not only free, but compulsory: any child under 15, therefore, must undergo an education test before being allowed to go to factory work. Children under 16 years must be certified by an inspector to be physically fitted for factory work. Women and children under 18, may not work before 7·15 a.m., or after 6 p.m., nor more than forty-eight hours per week. All factory workers (time or piece) are entitled to the half-holiday, after 1 p.m. on Saturday—in the case of time workers, without deduction from wages. The rates of pay and hours of labour have to be publicly notified and returned to inspectors. Overtime may be permitted by inspectors on twenty-eight days a year, but overtime pay must not be less than 6d. per hour extra. Even the huts in which the nomadic shearer lives while working on a sheep station are placed under the operation of this Act.

The Labour legislation of the Ballance Ministry dealt with the abolition of the disabilities of trades unionists, the supervision of servants' registry offices, the incorporation of Trades Unions, the creation of Boards of Conciliation and a Central Court of Arbitration, the passing of a Shipping and Seamen's Act, and so on, all framed in the widest spirit of democracy.

The Earl of Glasgow left the Colony on the 6th February, 1897, and Chief Justice Sir James Prendergast administered affairs from that date until the arrival of the Earl of Ranfurly. During the Record Reign rejoicings, the Premier, the Hon. Richard Seddon, and some of the New Zealand troops were present in London, with other Australasian Premiers and troops, and took part in the festivities. One of the Universities made Mr. Seddon a Doctor of Laws, and Her Majesty made him a Privy

Councillor. Sir George Grey, who for a great portion of his career had been so intimately connected with the Colony's affairs, died in England in 1898, the news of his death causing a feeling of profound sorrow throughout New Zealand. In the same year also occurred the death of Bishop Selwyn, of Melanesia. On the 1st November, 1898, another addition to New Zealand's democratic legislation became law, in the form of an Old Age Pensions Act. Up to the 31st March, 1899, the total number of pensions granted under the Act was 7,487, representing a yearly payment of £128,082, the average pension being about £17 2s. Early in 1899 the Colony lost another of its foremost politicians in the person of Sir Julius Vogel, who died on the 13th March of that year.

In the following table will be found a list of the successive Ministries which have held office in New Zealand from the inauguration of Responsible Government up to the date of publication of this volume :—

No. of Ministry.	Name.	Date of Appointment.	Date of Retirement.	Duration.	
				Months.	Days.
1	Bell-Sewell	7 May, 1856	20 May, 1856	0	13
2	Fox	20 May, 1856	2 June, 1856	0	13
3	Stafford	2 June, 1856	12 July, 1861	60	10
4	Fox	12 July, 1861	6 Aug., 1862	12	25
5	Domett	6 Aug., 1862	30 Oct., 1863	14	24
6	Whitaker-Fox	30 Oct., 1863	24 Nov., 1864	12	25
7	Weld	24 Nov., 1864	16 Oct., 1865	10	22
8	Stafford	16 Oct., 1865	28 June, 1869	44	12
9	Fox	28 June, 1869	10 Sept., 1872	38	13
10	Stafford	10 Sept., 1872	11 Oct., 1872	1	1
11	Waterhouse	11 Oct., 1872	3 Mar., 1873	4	21
12	Fox	3 Mar., 1873	8 April, 1873	1	5
13	Vogel	8 April, 1873	6 July, 1875	26	28
14	Pollen	6 July, 1875	15 Feb., 1876	7	9
15	Vogel	15 Feb., 1876	1 Sept., 1876	6	16
16	Atkinson	1 Sept., 1876	13 Sept., 1876	0	12
17	Atkinson	13 Sept., 1876	15 Oct., 1877	13	2
18	Grey	15 Oct., 1877	8 Oct., 1879	23	23
19	Hall	8 Oct., 1879	21 April, 1882	30	13
20	Whitaker	21 April, 1882	25 Sept., 1883	17	4
21	Atkinson	25 Sept., 1883	16 Aug., 1884	10	22
22	Stout-Vogel	16 Aug., 1884	28 Aug., 1884	0	12
23	Atkinson	28 Aug., 1884	3 Sept., 1884	0	6
24	Stout-Vogel	3 Sept., 1884	8 Oct., 1887	37	5
25	Atkinson	8 Oct., 1887	24 Jan., 1891	39	16
26	Ballance	24 Jan., 1891	1 May, 1893	27	7
27	Seddon	1 May, 1893	.....	.....	.....

PARLIAMENTS.

FROM the nature and composition of the population of Australia at and for some time after its first settlement, the government and direction of affairs naturally rested in the hands of the Governor alone, and it was not until the year 1824, during the time of Sir Thomas Brisbane, that any attempt was made to provide the Governor with recognised advisers. In that year the first Legislative Council was appointed, consisting of six gentlemen, of whom five held the principal official positions in the colony, the sixth being Mr. John Macarthur, the founder of the Australian wool industry. The first Act of Parliament ever passed in Australia was a measure dealing with the currency, in 1824. Four more members were added to the Council in the following year, by Governor Darling, and further additions were made from time to time. On the 6th June, 1838, the public were first admitted to hear the debates, for up to that time even the representatives of the Press had been excluded; thenceforth the proceedings were more or less fully reported.

Until 1843 the members of the Legislative Council were all nominated by the Governor, but in that year the principle of election was introduced, in conjunction with that of nomination. The nominated members were twelve in number, six being official and six non-official. The elected members comprised a number of men whose names have become historic, such as W. C. Wentworth, William Bland, William Lawson, Charles Cowper, Terence Aubrey Murray, W. H. Suttor, Francis Lord, Richard Windeyer, Alexander Macleay, Roger Therry, Charles Nicholson, and John Dunmore Lang, the two last mentioned being among the representatives of the Port Phillip district, now known as Victoria. Mr. Alexander Macleay was the first Speaker of this body, succeeded by Sir Charles Nicholson in 1846.

Partial representation in the Legislature did not altogether satisfy the colonists, for as far back as the year 1845 the question of Responsible Government was publicly discussed. The agitation, once awakened, was never allowed to slumber, and aided by a vigorous and outspoken Press, as well as by the talented oratory of some of the patriotic members of the Legislature, it continually became more active until in the year 1855 the Imperial Parliament passed a measure to sanction the new Constitution that the colonists sought. On the 22nd May, 1856, the first Australian Parliament under Responsible Government was opened

by Sir William Denison in Sydney. It consisted of a nominated Upper House, called the Legislative Council, the number of members of which was not definitely fixed; and a Legislative Assembly, consisting of fifty-four elected members, of whom Sir Daniel Cooper was chosen the first Speaker. The first Ministry consisted of Sir Stuart Alexander Donaldson, as Colonial Secretary and Premier; Mr. Thomas Holt, Colonial Treasurer; Sir William Manning, Attorney-General; Mr. J. B. Darvall, Solicitor-General; Mr. G. R. Nichols, Auditor-General; and Mr. W. C. Mayne as Representative of the Government in the Legislative Council. From that period the principles upon which the government of New South Wales is based have never altered, though there have been some changes in the details. Various amendments of the Electoral Act have taken place from time to time, by which the number of representatives to the Legislative Assembly has been largely increased, and alterations have taken place in the direction of the removal of restrictions, and the extension of the liberties of the people. The Legislative Council now numbers seventy-eight members, and the tenure of a seat in that body is for life. The only qualification required of members is that they shall be 21 years of age, and natural-born or naturalised subjects. The qualification for a member of the Assembly is the holding of an elector's right. Members of the Lower House receive a remuneration of £300 a year, but members of the Council are unpaid. Free passes by rail and tram are received by members of both Houses.

A new Electoral Act, assented to on the 13th June, 1893, remodelled the whole electoral system of New South Wales. The number of members of the Assembly is fixed at 125, and the colony is divided into 125 electoral districts. No elector can have more than one vote, or, in other words, the "one man one vote" principle is enforced. Every person entitled to vote must see that his name is inscribed on the electoral roll and must provide himself with a document called an "elector's right," without the production of which he cannot demand a ballot-paper. The suffrage is manhood, the only conditions being twelve months' residence in the colony in the case of an immigrant, and three months' residence in the electoral district in which the right to vote is claimed. In the case of removal from one district to another, the qualifying residential period is reduced to one month, and the elector may vote in his old district until he has acquired the month's residential qualification in the district to which he has removed. In 1896 the franchise was extended to the Police Force. The duration of Parliament is limited to three years. There have been seventeen Parliaments in New South Wales, the average existence of which has been two years three months and five days. At the general election for the eighteenth Parliament, which took place on the 27th July, 1898, there were 324,339 electors on the roll, 316,820 of whom were in 122 contested constituencies. Of the latter, 178,717 exercised their right to vote, forming only 56·41 per cent. of the electors enrolled. It must be pointed out, however, that the number of names enrolled is largely in excess of

the number of electors entitled to vote, and that the true proportion would be about 64·75 per cent.

The example of New South Wales was not without effect on the other Australasian colonies. Victoria, after its separation from New South Wales, was legislated for by a Council, some of the members of which were nominated and others elected; but on the 21st November, 1856, the first Parliament under the new Constitution of the Colony was opened. This Constitution differed from that of the parent Colony in that the Legislative Council as well as the Assembly was elective; it consisted of thirty members, while there were fifty-eight in the Lower House. Mr. W. C. Haines was the first Premier. There are now forty-eight members in the Council, and ninety-five in the Assembly. Members of the Upper House must be of the full age of 30 years, and for one year previous to the election have possessed a freehold estate of the value of £100 per annum, free of encumbrance. The tenure of office is six years, and there is no remuneration attached to the position. Electors must possess a £10 freehold, or be lessees, assignees, or occupying tenants of property rated at not less than £25 per year. Graduates of British or Colonial Universities, legal and medical practitioners, clergymen, certified school-masters, military and naval officers, and matriculated students of the Melbourne University are entitled to the franchise. Members of the Assembly must be 21 years of age, natural-born or naturalised subjects, and have been resident in the colony for two years. The reimbursement is £300 per annum, with a free railway pass. Three years is the limit of the duration of a Parliament. The suffrage is practically manhood, with residence in the Colony of twelve months' duration. There have been sixteen complete Parliaments in Victoria under the present Constitution, the average duration of each being two years and five months. The general election for the seventeenth Parliament took place in October, 1897. There were at that time 254,155 electors enrolled, of whom 225,000 were in eighty-two contested constituencies. Of these, 158,225, or 70·32 per cent., voted.

Tasmania, on its separation from New South Wales at the end of 1825, was provided with a nominated Legislative Council, under which it was governed for some thirty years. Following the lead of their neighbours, the colonists of this island also agitated for a Constitution, which was eventually granted to them, and came into force on the 2nd December, 1856. Tasmania now possesses a Legislative Council and a Legislative Assembly, both of which are elective. The Council consists of eighteen members, who hold their seats for six years, three members, or one-sixth of the whole number, retiring every year. In the case of *ad interim* elections, the incoming member holds his seat only as long as his predecessor would have held it. Members must be 30 years of age, and natural-born or naturalised subjects. Judges of the Supreme Court, placemen (except Ministers of the Crown), and Government contractors are disqualified from sitting in either Upper or Lower House. Members

of both Houses receive a reimbursement of expenses, which at the present time is at the rate of £100 per annum. Electors for the Council must possess a property qualification of £10 per annum freehold or £30 leasehold, beside which there are professional and educational qualifications, coupled with a condition of residence. There are thirty-eight members of the House of Assembly, who must be 21 years of age and natural-born or naturalised subjects. The duration of the Assembly is now limited to three years. Natural-born or naturalised adult males are qualified to be electors by a six months' term of residence in any of the prescribed districts. The eleventh Parliament expired by effluxion of time in December, 1896. The actual term of existence of Tasmanian Parliaments has averaged three years five months and sixteen days. At the general election for the twelfth Parliament, which took place early in 1897, there were about 30,300 electors on the roll. Of these, 19,850 were in fifteen contested constituencies. The number who voted was 11,950, or 57·68 per cent. By the Constitution Amendment Act of 1900 it was provided that no member of either House of Parliament of the Commonwealth of Australia shall be capable of sitting as a member of one or other of the Houses of Legislature in Tasmania.

South Australia, like most of the other Australian colonies, was at first subject to the nominee system of appointment to the Legislative Council, but in 1848 it obtained the boon of adding elected members to those nominated. Constitutional Government was granted to the colony in 1856, and the first Parliament under the new order of things assembled on the 22nd April in the following year. The South Australian Legislature consists of a Legislative Council of twenty-four members and a House of Assembly of fifty-four. Both Houses are elected by the people. Eight members of the Council retire every three years, but are eligible for re-election. Members are not required to have a property qualification, but they must have resided in the province for three years, and be not less than 30 years of age. An elector must have a freehold of £50 or a leasehold of £20 annual value, or be an occupier of a dwelling of the clear annual value of £25; and he must have been registered six months prior to the election. The principle of "one man one vote" has long been in existence in South Australia; and for some time there has been in force a provision by which absent electors may, under certain restrictions, record their votes. Members of the Assembly, as well as electors, are qualified by being 21 years of age, and having been enrolled for six months before the election. Female suffrage was granted in 1895, and women voted for the first time at the general election held on the 25th April, 1896. Members of each House receive £200 per annum. The duration of a Parliament is limited to three years. There have been fifteen complete Parliaments, with an average duration of two years seven months and seven days. At the general election for the fifteenth Parliament, which took place in April, 1896, all the electorates in the colony were contested. The number of enrolled voters was 137,781, and of these 91,348, or 66·30 per cent., voted.

Queensland, which formed part of New South Wales until the end of the year 1859, was never under the nominee system as a separate colony, but commenced with Responsible Government, under which its first Parliament was opened on the 29th May, 1860. Its Legislative Council consists of members nominated by the Governor. There are forty-two at present, but no limit is fixed to the number. The tenure is for life. The qualification for members is that they must be 21 years of age, and natural-born or naturalised subjects. They receive no remuneration. The Legislative Assembly, of which there are seventy-two members, is elected by the people. Electors are enrolled under what is practically manhood suffrage, the only condition being six months' residence. Persons who possess freehold property of the value of £100 or house property of an annual value of £10, or who hold property on lease at an annual rent of £10, or a pastoral lease or license from the Crown, are entitled to vote in every district within which such property may be. Any person on the electoral roll is qualified to be a member of the Assembly. The duration of Parliament is limited to three years, and members of the Assembly receive £300 a year, with a free railway pass, and travelling expenses in the case of those members who are not in receipt of official salary. There have been twelve complete Parliaments, the average duration of which has been two years eleven months and eighteen days. The general election for the thirteenth Parliament took place in March, 1899. Three out of seventy-two seats were not contested. The total number of electors enrolled at the time was 97,046, of whom 94,679 were in contested electorates, and of these 74,919, or 79·13 per cent., voted.

In New Zealand, as in the other colonies, the form of government in the early days was of a mixed description, but in the year 1852 an Act was passed by the Imperial Parliament conferring upon the colony a Constitution. New Zealand was divided into six provinces, which were subsequently increased to nine, each governed by a Superintendent and a Provincial Council elected on a franchise which was practically equivalent to household suffrage. The provincial system, however, did not give satisfaction, and was abolished in 1876, when a system of Parliamentary Government for the whole of the colony came into existence. The Legislature now consists of two branches. There is a Legislative Council of forty-five nominees. Prior to 1891 the members held their seats for life, but in that year an Act was passed under which all new appointments to the Council are made for seven years only, though members are eligible for re-appointment. The honorarium is £150 per annum, with a deduction of £1 5s. per sitting in case of absence exceeding five sittings in one session, except from illness or some other unavoidable cause. The qualification for membership is that the person must be 21 years of age, and a natural-born or naturalised British subject. One-fourth of the total number of members is required to form a quorum. The House of Representatives consists of seventy-four members, of whom four are Maoris, elected to represent the natives.

The qualification for membership is simply registration as an elector. Persons of either sex who are not less than 21 years of age are entitled to vote, provided they have resided in the colony for one year, and in the electoral district for three months prior to registration, or hold freehold estate of the value of £25, and have held such for six months. Maoris are entitled to be placed on the European roll if they possess the latter qualification; if not, they are entitled to vote in one of the four native electorates, provided they are of age and reside therein. The principle of "one man one vote" has been in existence in the colony for a number of years. The honorarium of a member of the House of Representatives is £240 per annum, with travelling expenses to and from Wellington; and a deduction of £2 per sitting is made for all absences from the House exceeding five days per session, unless due to sickness or other unavoidable cause. The duration of a Parliament is three years. Twenty members are required to form a quorum. There have been thirteen complete Parliaments since constitutional government was conferred upon the colony, their average duration being three years one month and twelve days. At the general election for the fourteenth Parliament, which took place on the 6th December, 1899, all the constituencies except three were contested. In the sixty-two European electorates there were 360,018 electors on the rolls, of whom 279,330, or 77·6 per cent., exercised the franchise. In the four Maori electorates a total of 13,628 votes was recorded.

Western Australia, which was proclaimed a British colony on the 1st June, 1829, was the last of the group to enjoy the privilege of Responsible Government. At an early stage of its existence the colony possessed a Legislative Council, consisting exclusively of officials nominated by the Governor. Subsequently, elected members were added, representing the principal districts of the colony, and this state of things continued until the end of 1890, when the new Constitution came into existence. Under it two Houses of Legislature were established, the Upper House consisting of fifteen nominated members, and the Lower House of thirty members, representing the thirty electorates into which the Colony was divided. An amended Constitution Act, however, came into force in 1893, when the total population of the colony was found to exceed 60,000 persons. Under this Act the Legislative Council was increased to twenty-one, and the Legislative Assembly to thirty-three members. A further amending Act came into force in 1896, under the provisions of which the Legislative Council consists of twenty-four members, elected for six years; and the Legislative Assembly, of forty-four members, elected for four years. A member of the Legislative Council must be 30 years of age and free from legal incapacity, and must have resided in the Colony for at least two years. A member of the Legislative Assembly must be 21 years of age and free from legal incapacity, and must have resided in the colony for at least twelve months. Members of both Houses must either be natural-born subjects of the Queen, or have been naturalised five years, with residence in

the colony for the full period of five years in the case of a member of the Council, and for two years in the case of a member of the Assembly. An elector for the Upper House must have resided in the colony for twelve months, and for that time have held a freehold estate of the clear value of £100, or have been a householder occupying a dwelling of the annual value of £25 for the same period; or he must occupy a leasehold estate of the annual value of £25, with eighteen months of the lease to run, or have held a similar leasehold for the past eighteen months, or be a holder of a Crown lease or license of an annual value of not less than £10; or he must be on the electoral roll of a Municipality or Roads Board district in respect of property of not less than £25 annual value. To qualify a person as an elector for the Assembly, he must either have resided in the colony for one year, and in the district for which he makes his claim for six months, or for that time have held a freehold estate of not less than £50, or a house of an annual value of not less than £10, or a leasehold estate of similar value, or a pastoral or running lease of not less than £5 per annum, or be inscribed on the roll of a Municipal or Roads Board district within the electorate. Members of the Legislature are not paid for their services, but they travel free over the railway lines of the colony. The first Premier was the Hon. Sir John Forrest, K.C.M.G. There was one Parliament under the Constitution of 1890; and there has been one under the Constitution of 1893. Their average duration has been two years seven months and twelve days. The third Parliament was elected in April and May, 1897, when the total number of electors on the roll was 23,318. Contests took place for only twenty-six out of forty-four seats, the number of electors in the contested constituencies being 17,114, of whom 9,016, or 52·69 per cent., exercised their right to vote.

The following table shows the number of members of each of the Houses of Parliament in the various colonies, with the remuneration which they receive in consideration of their services :—

State.	Legislative Council.		Legislative Assembly.	
	No. of members.	Remuneration.	No. of members.	Remuneration.
New South Wales	78	None	125	£300 per ann.
Victoria	48	None	95	£300 ,,
Queensland	40	None	72	£300 ,,
South Australia	24	£200 per ann.	54	£200 ,,
Western Australia	24	None	44	None.
Tasmania	18	£100 per ann.	38	£100 per ann.
New Zealand	45	£150 per ann.	74	£240 per ann.

The Federal Movement.

The question of the federation of the various provinces of Australia was not overlooked by the framers of the first free Australian Constitution, who proposed the establishment of a General Assembly "to make laws in relation to those intercolonial questions that have arisen, or may hereafter arise," and who, indeed, sketched out a tolerably comprehensive federation scheme. Unfortunately, however, that proposition was included with another for the creation of colonial hereditary nobility, and in the storm of popular opposition and ridicule with which the latter idea was greeted, the former sank out of sight. Again, in 1853, the Committees appointed in New South Wales and Victoria to draw up the Constitutions of their respective colonies, urged the necessity for the creation of a General Assembly; but the Home Government indefinitely postponed the question by declaring that "the present is not a proper opportunity for such enactment." From time to time, since Responsible Government was established, the evil of want of union among the Australian colonies has been forcibly shown, and the idea of federation has gradually become more and more popular. Some years ago (1883) the movement took such shape that, as the result of an Intercolonial Conference, the matter came before the Imperial Parliament, and a measure was passed permitting the formation of a Federal Council, to which any colony that felt inclined to join could send delegates. The first meeting of the Federal Council was held at Hobart in January, 1886. The colonies represented were Victoria, Queensland, Tasmania, Western Australia, and Fiji. New South Wales, South Australia, and New Zealand declined to join. South Australia sent representatives to a subsequent meeting, but withdrew shortly afterwards. The Council held eight meetings, at which many matters of intercolonial interest were discussed, the last having been held in Melbourne, early in 1899. One meeting every two years was necessary to keep the Council in existence. Being, from its inherent constitution, a purely deliberative body, having no executive functions whatever, the Federal Council possessed no control of funds or other means to put its legislation into force, and those zealous in the cause of federation have had to look elsewhere for the full realisation of their wishes. The Council, naturally, ceased to exist at the inception of the Commonwealth.

An important step towards the federation of the Australasian colonies was taken early in 1890, when a Conference, consisting of representatives from each of the seven colonies of Australasia, was held in the Parliament House, Melbourne. The Conference met on the 6th February, thirteen members being present, comprising two representatives from each of the colonies, except Western Australia which sent only one. Mr. Duncan Gillies, Premier of Victoria, was elected President. Seven meetings were held, the question of federation being discussed at considerable length; and in the end the Conference adopted an address to the Queen, expressing their loyalty and attachment, and submitting

certain resolutions which affirmed the desirability of an early union, under the Crown, of the Australian colonies, on principles just to all; suggested that the remoter Australasian colonies should be entitled to admission upon terms to be afterwards agreed upon; and recommended that steps should be taken for the appointment of delegates to a National Australasian Convention, to consider and report upon an adequate scheme for a Federal Constitution.

In accordance with the terms of that resolution, delegates were appointed by the Australasian Parliaments, and on the 2nd March, 1891, the National Australasian Convention commenced its sittings in the Legislative Assembly Chambers, Sydney, having been convened at the instance of Mr. James Munro, the Premier of Victoria. There were forty-five members of the Convention altogether, New South Wales, Victoria, Queensland, Tasmania, and Western Australia (which had only recently been placed in possession of the privilege of Responsible Government) each sending seven delegates, and New Zealand three. Sir Henry Parkes, then Premier of the mother colony, was unanimously elected President of the Convention; Mr. F. W. Webb, Clerk of the Legislative Assembly of New South Wales, was appointed Secretary; Sir Samuel Griffith, Premier of Queensland, was elected Vice-President; and Mr. (now Sir) J. P. Abbott, Speaker of the New South Wales Legislative Assembly, was elected Chairman of Committees.

A series of resolutions was moved by the President, Sir Henry Parkes, setting forth certain principles necessary to establish and secure an enduring foundation for the structure of a Federal Government, and approving of the framing of a Federal Constitution; and after discussion and amendment, the resolutions were finally adopted, affirming the following principles:—

1. The powers and rights of existing colonies to remain intact, except as regards such powers as it may be necessary to hand over to the Federal Government.
2. No alteration to be made in State boundaries without the consent of the Legislatures of such States, as well as of the Federal Parliament.
3. Trade between the federated colonies to be absolutely free.
4. Power to impose Customs and Excise Duties to rest with the Federal Government and Parliament.
5. Military and Naval Defence Forces to be under one command.
6. The Federal Constitution to make provision to enable each State to make amendments in its Constitution if necessary for the purposes of Federation.

Further resolutions approved of the framing of a Federal Constitution which should establish a Senate and a House of Representatives—the latter to possess the sole power of originating money Bills; also a Federal Supreme Court of Appeal, and an Executive consisting of a Governor-General, with such persons as might be appointed his advisers.

On the 31st March, Sir Samuel Griffith, as Chairman of the Committee on Constitutional Machinery, brought up a draft Constitution Bill, which was fully and carefully considered by the Convention in Committee of the Whole, and adopted on the 9th April, when the Convention was formally dissolved.

The Bill of 1891 aroused no popular enthusiasm, and parliamentary sanction to its provisions was not sought in any of the colonies; thus federation fell into the back-ground of politics.

At this juncture a section of the public began to exhibit an active interest in the cause which seemed in danger of being temporarily lost through the neglect of politicians. Public Associations showed sympathy with the movement, and Federation Leagues were organised to discuss the Bill and to urge the importance of federal union upon the people. A conference of delegates from Federation Leagues and similar Associations in New South Wales and Victoria was called at Corowa in 1893. The most important suggestion made at this Conference was that the Constitution should be framed by a Convention to be directly elected by the people of each colony for that purpose. This new proposal attracted the favourable attention of Mr. G. H. Reid, Premier of New South Wales, who perceived that a greater measure of success could be secured by enlisting the active sympathy and aid of the electors, and who brought the principle to the test in 1895. In January of that year he invited the Premiers of the other colonies to meet in conference for the purpose of devising a definite and concerted scheme of action. At this Conference, which was held at Hobart, all the Australasian colonies except New Zealand were represented. It was decided to ask the Parliament of each colony to pass a Bill enabling the electors qualified to vote for members of the Lower House to choose ten persons to represent the colony on a Federal Convention. The work of the Convention, it was determined, should be the framing of a Federal Constitution, to be submitted, in the first instance, to the local Parliaments for suggested amendments, and, after final adoption by the Convention, to the electors of the various colonies for their approval by means of the referendum.

In 1896 a People's Federal Convention, an unofficial gathering of delegates from various Australian organisations, met at Bathurst to discuss the Commonwealth Bill in detail, and by its numbers and enthusiasm gave valuable evidence of the increasing popularity of the movement.

In accordance with the resolutions of the Convention of 1895, Enabling Acts were passed during the following year by New South Wales, Victoria, South Australia, Tasmania, and Western Australia; and were brought into operation by proclamation on the 4th January, 1897. Meanwhile Queensland held aloof from the movement, after several attempts to agree on the question of the representation of the Colony. The Convention met in Adelaide, Mr. C. C. Kingston, Premier of South Australia, being elected President; and Sir Richard Baker,

President of the Legislative Council of South Australia, Chairman of Committees; while Mr. Edmund Barton, Q.C., one of the representatives of the mother colony, and a gentleman who had taken a deep interest in the movement, acted as leader of the Convention. The final meeting of the session was held on the 23rd April, when a draft Constitution was adopted for the consideration of the various Parliaments, and at a formal meeting on the 5th May, the Convention adjourned until the 2nd September. On that date the delegates re-assembled in Sydney, and debated the Bill in the light of suggestions made by the Legislatures of the federating colonies. In the course of the proceedings, it was announced that Queensland desired to come within the proposed union; and, in view of this development, and in order to give further opportunity for the consideration of the Bill, the Convention again adjourned. The third and final session was opened in Melbourne on the 20th January, 1898, the Colony of Queensland being still unrepresented; and, after further consideration, the Draft Bill was finally adopted by the Convention on the 16th March for submission to the people.

In its main provisions the Bill of 1898 followed generally that of 1891, yet with some very important alterations. It proposed to establish, under the Crown, a federal union of the Australasian colonies, to be designated the Commonwealth of Australia. A Federal Executive Council was created, to be presided over by a Governor-General appointed by the Queen. The Legislature was to consist of two Houses—a Senate, in which each colony joining the Federation at its inception was conceded the equal representation of six members; and a House of Representatives, to consist of, as nearly as possible, twice the number of Senators, to which the provinces were to send members in proportion to population, with a minimum number of five representatives for each of the original federating states. The principle of payment of members was adopted for the Senate as well as for the House of Representatives, the honorarium being fixed at £400 per annum. The nominative principle for the Upper House was rejected, both Houses being elective, on a suffrage similar to that existing in each colony for the popular Chamber at the foundation of the Commonwealth. At the same time, it was left to the Federal Parliament to establish a federal franchise, which, however, could only operate in the direction of the extension, not the restriction, of any of the existing privileges of the individual colonies; so that in South Australia and New Zealand the right of women to vote cannot be withdrawn by the central authority so long as adult suffrage prevails in those States. While the House of Representatives was to be elected for a period of three years, Senators were to be appointed fortw ice that term, provision being made for the retirement of half their number every third year. The capital of the Commonwealth was to be established in federal territory.

To the federal authority was assigned power to deal with a large number of matters, with the provision that in case of a conflict between

Federal and State law, the former would prevail. Customs and Excise were to be taken over on the establishment of the Commonwealth; and posts and telegraphs, naval and military defence, lighthouses and lightships, beacons and buoys, and quarantine, on dates to be proclaimed, but without further legislation. A uniform tariff of Customs and Excise was to be imposed within a period of two years, intercolonial trade then to become absolutely free. As it was recognised that the transfer of the services mentioned would leave the States with large deficiencies in their provincial finances, a provision was inserted in the Bill under which the Commonwealth was required to raise from Customs and Excise Duties four times the sum needed from that source for its own purposes in the exercise of the original powers conferred upon it, and to hand the excess thus raised to the local treasuries. Other sources of revenue were left open to the Federal Treasurer, so that he should not be compelled to go to the Customs for the whole revenue which might be required. For five years after the imposition of the uniform tariff, it was provided that the surplus revenue raised should be returned to the States in the proportions of their actual contributions—to be ascertained by a system of accounts—and thereafter in such proportions as might be considered fair by the Federal Parliament. The province of Western Australia, where the Customs revenue is exceptionally high, and is largely collected on the produce of the other colonies, was to be permitted gradually to relinquish its intercolonial duties during a period of five years, instead of abandoning them at once, and to retain for its own purposes the revenue thus secured. Power was given to the Commonwealth to take over the railways of the colonies with their consent, and to take over the whole or part of the State debts, applying the surplus Customs and Excise revenue to the payment of the interest charge thereon. The proper administration of all laws relating to the transaction of the trade between the States of the Union was to be directed by an Inter-State Commission, on whom extensive powers were conferred. Provision was made for the prevention of the imposition of preferential and discriminating railway tariffs which might operate unjustly against a neighbouring colony, due regard always being paid, however, to the financial obligations of the State which had laid down the lines. The maintenance of the rivers in a state of navigability was recognised as coming within the trade and commerce provisions; but the people of a colony through which a river flows were not to be deprived of a "reasonable" use of its waters for purposes of irrigation and conservation.

The Senate and the House of Representatives would have equally the power of originating Bills, with the exception of Bills appropriating revenue or imposing taxation, the right of originating which is reserved to the House of Representatives. These appropriation or taxation Bills could not be amended by the Senate; but the Upper House might suggest amendments, or recommend the omission of any of their pro-

visions, the House of Representatives dealing with these suggestions as it pleased. In all other matters of legislation, the two Houses were granted equal powers; and it was provided that, in the event of any Bill being twice passed by the House of Representatives and twice rejected or shelved by the Senate, the two Houses could be simultaneously dissolved; and if this failed to provide a solution of the difficulty, a joint sitting might be held, at which the Bill in dispute could be adopted by a majority of three-fifths of the members present and voting at the joint sitting. The judicial power of the Commonwealth was vested in a High Court of Australia, empowered to hear appeals from all federal Courts or Courts having federal jurisdiction, from the Supreme Courts of the States, and from the Inter-State Commissions. The right of appeal to the Privy Council in all cases not involving the interpretation of the Federal Constitution or the Constitution of a State was not abrogated; but the Federal Parliament was empowered to limit the matters which might be taken to England. Appeal to the Privy Council on points of Constitutional law was forbidden. Lastly, the Federal Constitution could only be amended if the proposal were first adopted by an absolute majority of both the Senate and House of Representatives, and afterwards accepted by means of the referendum, both by a majority of the people of the Commonwealth and by a majority of the States.

Warmly received in Victoria, South Australia, and Tasmania, the Bill was viewed somewhat coldly by a section of the people of New South Wales, and this feeling rapidly developed into one of active hostility, the main points of objection being the financial provisions, equal representation in the Senate, and the difficulty which the larger colonies must experience in securing an amendment of the Constitution in the event of a conflict with the smaller States. As far as the other colonies were concerned, it was evident that the Bill was safe, and public attention throughout Australasia was riveted on New South Wales, where a fierce political contest was raging, which it was recognised would decide the fate of the measure for the time being. The fears expressed by its advocates were not so much in regard to securing a majority in favour of the Bill, as to whether the statutory number of 80,000 votes necessary for its acceptance would be reached. These fears were proved to be well founded; for on the 3rd June 1898, the result of the referendum in New South Wales showed 71,595 votes in favour of the Bill, and 66,228 against it, and it was accordingly lost. In Victoria, Tasmania, and South Australia, on the other hand, the Bill was accepted by triumphant majorities. Western Australia did not put it to the vote; indeed, it was useless to do so, as the Enabling Act of that colony only provided for joining a Federation of which New South Wales should form a part.

The existence of such a strong opposition to the Bill in the mother colony convinced even its most zealous advocates that some changes would have to be made in the Constitution before it could be forced

upon the people; consequently, although the general election in New South Wales, held six or seven weeks later, was fought on the Federal issue, yet the opposing parties seemed to occupy somewhat the same ground, and the question narrowed itself down to one as to which should be entrusted with the negotiations to be conducted on behalf of the colony with the view to securing a modification of the objectionable features of the Bill. The new Parliament decided to adopt the procedure of sending the Premier, Mr. Reid, into conference, armed with a series of resolutions affirming its desire to bring about the completion of federal union, but asking the other colonies to agree to the reconsideration of the provisions which were most generally objected to in New South Wales. As they left the Assembly, these resolutions submitted—first, that, with equal representation in the Senate, the three-fifths majority at the joint sitting of the two Houses should give way to a simple majority, or the joint sitting be replaced by a provision for a national referendum; second, that the clause making it incumbent upon the Federal Government to raise, in order to provide for the needs of the States, £3 for every £1 derived from Customs and Excise Duties for its own purposes, and thus ensuring a very high tariff, should be eliminated from the Bill; third, that the site of the Federal Capital should be fixed within the boundaries of New South Wales; fourth, that better provision should be made against the alteration of the boundaries of a State without its own consent; fifth, that the use of inland rivers for the purposes of water conservation and irrigation should be more clearly safeguarded; sixth, that all money Bills should be dealt with in the same manner as Taxation and Appropriation Bills; and seventh, that appeals from the Supreme Courts of the States should uniformly be taken, either to the Privy Council or to the Federal High Court, and not indiscriminately to either; while the House also invited further inquiry into the financial provisions of the Bill, although avowing its willingness to accept these provisions if in other respects the Bill were amended. These were all the resolutions submitted by the Government to the House, but the Assembly appended others in respect to the alteration of the Constitution and the number of Senators, submitting, on the first of these points, that an alteration of the Constitution should take effect, if approved by both Houses and a national referendum; that a proposed alteration should be submitted to the national referendum, if affirmed in two succeeding sessions by an absolute majority in one House, and rejected by the other; and that no proposed alteration, transferring to the Commonwealth any powers retained by a State at the establishment of the federation, should take effect in that State, unless approved by a majority of electors voting therein; and, on the second point, that the number of Senators should be increased from six to not less than eight for each State.

The Legislative Council adopted the resolutions with some important amendments, discarding the suggestion in the first resolution for a national referendum; submitting that the seat of the Federal Govern-

ment should be established at Sydney; more clearly preserving the rights of the people of the colony to the use of the waters of its inland rivers for purposes of water conservation and irrigation; carrying all appeals from the Supreme Courts of the States to the Privy Council; and declining to affirm its preparedness to accept the financial scheme embodied in the Bill. Further, the House suggested that the plan of submitting proposed alterations of the Constitution to the people by means of the referendum should be altered, and that no rights or powers retained by a State should be afterwards transferred to the Commonwealth without the consent of both Houses of Parliament of that State. The New South Wales Premier decided to submit the resolutions of both Houses to the other Premiers in conference, attaching, however, greater importance to those of the Assembly, as embodying the views of a House which had just returned from the country. This conference was held in Melbourne at the end of January, 1899, Queensland being represented; and an agreement was arrived at, whereby it was decided that, in the event of a disagreement between the two Houses of Parliament, the decision of an absolute majority of the members of the two Houses should be final; that the provision for the retention by the Commonwealth of only one-fourth of the Customs and Excise revenue might be altered or repealed at the end of ten years, another clause being added, permitting the Parliament to grant financial assistance to a State; that no alterations in the boundaries of a State should be made without the approval of the people as well as of the Parliament of that State; and that the seat of Government should be in New South Wales, at such place, at least 100 miles from Sydney, as might be determined by the Federal Parliament, and within an area of 100 square miles of territory, to be acquired by the Commonwealth, it being provided that the Parliament should sit at Melbourne until it met at the seat of Government. A special session of the New South Wales Parliament was convened to deal with this agreement, and the Legislative Assembly passed an Enabling Bill, referring the amended Constitution to the electors. The Council, however, amended the Bill so as to—first, secure the postponement of the referendum for a period of three months; second, make it necessary for the minimum vote cast in favour of the Bill to be one-fourth of the total number of electors on the roll; third, defer the entrance of New South Wales into the Federation until Queensland should come in. These amendments were not accepted by the Assembly, and a conference between representatives of the two Houses was arranged; but this proved abortive, and twelve new members were appointed to the Upper House in order to secure the passage of the Bill. This course had the effect desired by the Government; for the Council passed the Bill on the 19th April, an amendment postponing the referendum for eight weeks being accepted by the Assembly. The vote on the Bill was, therefore, taken on the 20th June, 1899, the result of the voting being 107,420 votes in favour of the Bill, and 82,741 votes against it. The

Bill was consequently adopted by a majority of 24,679 votes, and the necessary addresses having been passed by both Houses of Parliament, it was sent to London for approval by the Imperial Parliament. The colonies of Victoria, Queensland, South Australia, and Tasmania also adopted the amended Bill with large majorities. Western Australia still hung back, but an Enabling Bill was eventually passed, and a plebiscite, taken on July 31, 1900, resulted in a victory for the Bill.

Though the Bill was favourably received by the Imperial Government, certain amendments, the most important of which referred to the appeal to the Privy Council, were proposed by Mr. Chamberlain, Secretary of State for the Colonies. Four delegates were sent from the federating states to protest against any material alteration of the Bill. Mr. Chamberlain had proposed that, notwithstanding anything in the Constitution, the prerogative of Her Majesty to grant special leave to appeal to Her Majesty in Council might be exercised with respect to any judgment or order of the High Court of the Commonwealth or of the Supreme Court of any State. At the same time, he promised a reconstituted Court of Appeal for the Empire, in which the Australian Colonies would find representation. The delegates, however, opposed with all their might the submission of constitutional disputes to the decision of the Privy Council under any pretext. A compromise was, therefore, agreed upon between the delegates and Mr. Chamberlain, by which the consent of the Executive Government or Governments concerned was made a necessary condition precedent to an appeal from the High Court to the Privy Council in such cases. The new clause provoked much hostile comment in the colonies, with the result that the Premiers cabled a rejection of the arrangement. A fresh compromise was then prepared, by which it was determined that the right of appeal to the Privy Council, where a constitutional point purely Australian in character was involved, might be conceded at its pleasure by the High Court. By this settlement the finality of the decisions of the High Court upon matters of constitutional interpretation is preserved. Accordingly, the Legislatures of the federating colonies agreed to the amendment. Thenceforward no further obstruction was offered to the passage of the Bill, and it received the Royal assent on the 9th July.

Lord Hopetoun, who at one time held office as Governor of Victoria, has been appointed first Governor-General of the Commonwealth of Australia. The proclamation of the new Commonwealth is to be made on the first day of January, 1901.

POPULATION.

ON the 26th January, 1788, Captain Phillip arrived in Sydney Harbour, bringing with him an establishment of about 1,030 people all told. Settlement soon spread from the parent colony, first to Tasmania in 1803, and afterwards to other parts of the continent and to New Zealand. At the end of 1899 the population of Australasia had increased to 4,482,980 persons, thus distributed :—

State.	Males.	Females.	Total.
New South Wales	729,005	627,645	1,356,650
Victoria	580,660	582,800	1,163,400
Queensland	267,340	215,060	482,400
South Australia	194,560	176,140	370,700
Western Australia	112,290	58,740	171,030
Tasmania	98,640	83,660	182,300
Commonwealth	1,982,435	1,744,045	3,726,480
New Zealand	398,680	357,820	756,500
Australasia	2,381,115	2,101,865	4,482,980

If to these numbers, which principally comprise the people of European descent, there be added an estimated population of 200,000 Australian aborigines in an uncivilised state in Western Australia, South Australia, and Queensland, and of nearly 40,000 Maoris in New Zealand, the total population of Australasia at the end of 1899 would be about 4,723,000.

The growth of the population of Australasia from the date of the first settlement is shown in the following table. An official enumeration of the people was made in most of the years quoted :—

Year.	Population of Australasia.	Annual Increase per cent.	Year.	Population of Australasia.	Annual Increase per cent.
1788	1,030	.....	1891*	3,809,895	3·34
1801	6,508	15·13	1892	3,967,050	2·10
1811	11,525	11·94	1893	4,044,790	1·96
1821	35,610	5·88	1894	4,123,700	1·95
1831	79,306	8·34	1895	4,201,280	1·88
1841	211,095	10·28	1896	4,278,590	1·84
1851	430,596	7·36	1897	4,358,380	1·86
1861*	1,252,994	11·30	1898	4,419,490	1.40
1871*	1,924,770	4·39	1899	4,482,980	1.44
1881*	2,742,550	3·60			

* Census population.

The high rate of increase of 11·30 per cent. from 1851 to 1861 was, of course, due to the gold discovery, which proved a strong incentive to emigration to these colonies. The high annual increase between 1831 and 1841 was owing to the policy of State-aided immigration which was then in vogue. Prior to this period the high average arose from the small number of people on which the increase was calculated.

The population of Australasia, as shown by the census of 1891, had increased threefold since 1861, and nearly twofold since 1871, while the annual rate of increase for the whole thirty years was 3·78 per cent. Taking the states individually, the rate of increase for Queensland was the highest—a circumstance partly to be attributed to the large numbers introduced under the system of State-aided immigration which has prevailed in that colony for many years ; but the largest numerical increase was that of New South Wales. The population of each state (exclusive of aborigines, a few in New South Wales and Victoria excepted) at the last four census periods, and at the end of 1899, is shown below :—

State.	1861.	1871.	1881.	1891.	1899.	Annual Increase per cent., 1861-1899.
New South Wales ...	350,860	503,981	751,468	1,132,234	1,356,650	3·55
Victoria	540,322	731,528	862,346	1,140,405	1,163,400	2·00
Queensland	30,059	120,104	213,525	393,718	482,400	7·43
South Australia	126,830	185,626	279,865	320,431	370,700	2·81
Western Australia...	15,691	25,353	29,708	49,782	171,030	6·36
Tasmania.....	90,211	101,785	115,705	146,667	182,300	1·83
Commonwealth ...	1,153,973	1,668,377	2,252,617	3,183,237	3,726,480	3·07
New Zealand	99,021	256,393	489,933	626,658	756,500	5·39
Australasia	1,252,994	1,924,770	2,742,550	3,809,895	4,482,980	3·34

In order to show the great differences in the growth of the population of the individual states during the last ten years, the appended table has been prepared, giving the population at the end of each year since 1890.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1890	1,121,860	1,133,270	392,960	319,410	46,290	145,290	626,050	3,785,130
1891	1,162,880	1,157,050	400,130	325,580	53,280	152,610	634,060	3,885,590
1892	1,193,780	1,165,270	409,040	336,750	58,670	153,110	650,430	3,967,050
1893	1,218,150	1,170,070	417,970	346,910	65,060	154,370	672,260	4,044,790
1894	1,244,460	1,173,090	428,540	352,030	82,070	157,380	686,130	4,123,700
1895	1,269,230	1,173,650	441,110	356,600	101,240	160,740	698,710	4,201,280
1896	1,286,970	1,164,510	450,300	358,690	137,950	166,010	714,160	4,278,590
1897	1,311,040	1,163,420	460,430	360,910	161,920	171,600	729,060	4,358,380
1898	1,333,840	1,160,190	471,510	365,160	168,130	177,200	743,460	4,419,490
1899	1,356,650	1,163,400	482,400	370,700	171,030	182,300	756,500	4,482,980

The total populations, at the end of each of the last ten years, of the six states which form the Australian Commonwealth are given below :—

1890	3,159,080	1895	3,502,750
1891	3,251,530	1896	3,564,430
1892	3,316,620	1897	3,629,320
1893	3,372,530	1898	3,676,030
1894	3,437,570	1899	3,726,480

The populations quoted for the various colonies for the years 1891 to 1899 differ slightly from estimates previously published. During February, 1900, a conference of Statisticians, held in Sydney, agreed upon certain estimates of population as at 31st December, 1899, and in consequence an adjustment has been made to place the populations for each year between 1891 and 1899 on a uniform basis with those adopted by the conference. The differences chiefly arose on account of larger allowances for unrecorded departures by sea being made than had formerly been the case.

The following table gives the total increase in each colony during the thirty-nine years, 1861–99, distinguishing the natural increase arising from the excess of births over deaths from the increase caused by the excess of arrivals over departures :—

State	Excess of—		Total Increase.
	Births over Deaths.	Immigration over Emigration.	
New South Wales	658,764	349,340	1,008,104
Victoria	614,404	11,149	625,553
Queensland	200,328	254,016	454,344
South Australia	213,007	33,581	246,588
Western Australia	27,694	128,109	155,803
Tasmania	81,398	13,127	94,525
New Zealand	406,917	269,872	676,789
Australasia	2,202,512	1,059,194	3,261,706

The information conveyed by the above figures is important, as illustrating not only the movement of population but also the effect upon immigration of local influences, such as the attraction of liberal land laws, the fertility of the soil, the permanence of employment, and the policy of assisted immigration. But a bare statement of the gross increase to each state from immigration is apt to be misleading, since the original density of population must be deemed a factor affecting

the current of immigration. The following figures show the density of population in each state at the time of taking the census on the four last occasions and at the close of 1899 :—

State.	1861.	1871.	1881.	1891.	1899.
New South Wales	1·13	1·62	2·42	3·65	4·34
Victoria	6·15	8·32	9·81	12·98	13·23
Queensland	0·04	0·18	0·32	0·59	0·72
South Australia	0·14	0·20	0·31	0·35	0·41
Western Australia	0·02	0·03	0·03	0·05	0·18
Tasmania	3·44	3·88	4·41	5·59	6·95
New Zealand	0·95	2·45	4·69	6·00	7·24
Australasia	0·41	0·63	0·89	1·24	1·45

At the close of the year 1899 the population of Australasia, including the native races, only reached a density of 1·53 persons per square mile—a rate which is far below that of any other civilised country; and excluding Australian aborigines and Maoris, the density was not more than 1·45 per square mile. But a comparison of the density of population in Australasia with that in older countries of the world is of little practical use, beyond affording some indication of the future of these states when their population shall have reached the proportions to be found in the old world. The latest authoritative statements give the density of the populations of the great divisions of the world as follows :—

Continent.	Area in square Miles.	Population.	Persons per square Mile.
Europe	3,742,000	372,925,000	99·66
Asia	17,101,000	830,558,000	48·57
Africa	11,510,000	170,050,000	14·77
America	14,805,000	132,718,000	8·96
Australasia and Pacific Islands.	3,457,000	5,907,000	1·71
Polar Regions	1,732,000	82,000	0·05
The World	52,347,000	1,512,240,000	28·89

From the earliest years of settlement there was a steady if not a powerful stream of immigration into these colonies, but in 1851, memorable for the finding of gold, the current was swollen by thousands of men in the prime of life who were attracted to the shores of Australia by the hope of speedily acquiring wealth. By far the greater number of these new arrivals settled in the new colony of Victoria, which had just been separated from New South Wales, and for some years afterwards Victoria had an unprecedented addition to its population. The vast changes which took place will be evident when it is stated that in 1850, just prior to the gold rush, the population of the northern and southern portions of New South Wales was :—

Port Phillip (afterwards Victoria)	76,162
Remaining portion of the Colony	189,341

While five years afterwards the population of the two colonies was :—

Victoria	364,324
New South Wales	277,579

Victoria enjoyed the advantage in population and increased its lead yearly until 1871, when its inhabitants exceeded in number those of New South Wales by no less than 229,654. But from that time almost every year showed a nearer approach in the numbers of the inhabitants of the two colonies, until at the census of 1891 Victoria had only a lead of 8,171, while at the end of that year New South Wales had the greater population by about 5,800. By the end of 1899 the parent colony had, as previously mentioned, increased its lead to over 193,000. In considering the question of increase of population, attention should be paid to the density as well as to the actual number of the population ; in regard to the case in point, the density of Victoria is 13·23 per square mile, and in New South Wales only 4·34.

New Zealand and Queensland, and Western Australia also in recent years, likewise owe much of their remarkable progress to the discovery of gold. In New Zealand the gold fever broke out in 1861, when the population numbered only 99,021, and the period of its activity extended over many years. At the end of 1899 the population had reached 756,500 souls, exclusive of Maoris, or seven and a half times that of 1861. In Queensland the attractive force of the goldfields was exerted at a later date, and it may still be considered a powerful factor in stimulating the growth of population in that colony ; while the development of Western Australia during the eight years ending 1898 was wholly due to the gold deposits discovered in that colony, the population increasing from the small number of 46,290 at the end of 1890 to 168,130 at the end of 1898. The great rush of miners to Western Australia has for the present ceased, as the net immigration for 1899 was only 50 ; but no one who knows the vast mineral possibilities of the colony will be surprised if fresh discoveries should at any time be made, and immigration on a large scale again set in.

Much of the increase of population, especially in the colonies of New South Wales, Queensland, and New Zealand, was due to the State policy of assisted immigration. The following table shows the number of all immigrants introduced into the colonies either wholly or partly at the expense of the state, up to the end of 1899 :—

State.	Prior to 1881.	1881 to 1899.	Total.
New South Wales	177,234	34,738	211,972
Victoria	140,102	.....	140,102
Queensland	52,399	112,714	165,113
South Australia	88,050	7,298	95,348
Western Australia.....	889	5,994	6,883
Tasmania.....	18,965	2,734	21,699
New Zealand	*100,920	14,658	*115,578
Australasia	578,559	178,136	756,695

* Exclusive of a number prior to 1870, of which no record can be found.

Queensland and Western Australia are the only states that at present assist immigrants ; New South Wales ceased to do so in 1888, Victoria practically ceased assisted immigration in 1873, South Australia in 1886, Tasmania in 1891, and New Zealand in 1891.

The following table shows the increase of population by excess of immigration over emigration for the four decennial periods ended 1890, and for the period of nine years 1891 to 1899 :—

State.	1851–60.	1861–70.	1871–80.	1881–90.	1891–99.
New South Wales.....	123,097	45,539	109,341	164,205	30,255
Victoria	398,753	38,935	*12,672	112,097	*127,221
Queensland	†	68,191	73,849	101,525	10,451
South Australia	33,024	17,949	34,569	*17,004	*1,933
Western Australia.....	6,870	5,319	*339	10,170	112,686
Tasmania	6,767	*3,228	*1,427	5,572	12,209
New Zealand.....	44,742	118,637	132,976	9,453	25,377
Australasia	613,253	291,342	336,297	386,018	61,824

* Denotes excess of emigrants. † Included in New South Wales figures.

Taking the nineteen years from 1881, it will be seen from the next table that no colony exhibits uniformity in the immigration returns, all of the provinces even showing an excess of departures in one or more years ; but, with the exception of Victoria and South Australia, the

colonies all show substantial increases from immigration over the whole period. If the results for the last nine years be compared, it will be found that Victoria lost 127,221 persons by an excess of emigration, while, on the other hand, Western Australia gained 112,686 persons during the same period. South Australia also lost to the extent of 1,933 persons, the remaining colonies all gaining slightly. Dealing with the year 1899, the exodus from Victoria was sufficient to more than counterbalance the arrivals in all the other colonies, so that for the first time in the history of Australasia there was displayed the remarkable fact of the departures exceeding the arrivals.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1881	16,673	4,976	4,009*	12,055	401	1,166	1,970	33,232
1882	16,034	6,563	17,043	3,679*	94	587	2,375	39,017
1883	27,278	6,597	34,371	4,266	436	689	8,657	82,294
1884	23,944	8,525	18,620	275	871	816	7,724	60,775
1885	24,829	9,027	7,056	9,280*	1,628	388*	2,757	35,629
1886	18,073	15,436	7,695	8,819*	3,738	302*	199*	35,622
1887	7,202	15,445	11,527	3,008*	2,049	1,797	211	35,223
1888	6,633	25,757	5,651	8,325*	1,196*	383*	10,548*	17,589
1889	8,241	9,794	4,340	2,346*	578	1,172	701*	21,078
1890	15,298	9,977	769*	1,857	1,571	418	2,793*	25,559
1891	17,848	3,906	2,375*	350*	6,073	4,583	3,745*	25,940
1892	5,269	13,760*	727	4,341	4,473	2,396*	4,953	2,153
1893	50	15,244*	231	4,013	5,223	1,885*	10,410	2,798
1894	2,529	15,808*	1,891	1,338*	15,968	96	2,260	5,598
1895	910	17,510*	2,848	2,034*	18,401	381	897	3,893
1896	2,927*	25,604*	818	3,875*	35,948	2,568	3,270	10,198
1897	1,087	17,274*	1,240	3,298*	22,592	2,853	2,758	9,958
1898	3,239	14,707*	3,390	12	3,958	3,379	2,689	1,960
1899	2,250	11,220*	3,135	596	50	2,630	1,885	674*

* Denotes excess of departures.

The great bulk of the movement of population within recent years, shown above, is only intercolonial; and it is evident that immigrants are not attracted to these colonies from abroad, the long sea voyage and cost of passage probably being the chief deterring reasons.

Ages of the People.

At the census of 1891 the average age of the population of Australasia was 24·4 years; the average age of the males was 25·5 years, and that of the females 23·3 years. The oldest population was that of Victoria, with an average of 25·6 years; and the youngest that of Queensland, with an average of 23·7 years.

The following table shows the number of males at the close of 1899 at the dependent ages from infancy to 15 years; at the supporting ages

from 15 to 65; in the old-age group, from 65 years upwards; and at the military ages from 20 to 40 years :—

State.	Dependent Ages, up to 15 years.	Supporting Ages, 15 and under 65.	Old Ages, 65 and over.	Military Ages, 20 to 40 years.
New South Wales	261,355	444,000	23,650	251,290
Victoria	181,500	363,920	35,180	200,130
Queensland	86,270	174,360	6,710	103,650
South Australia	74,370	113,490	6,700	62,940
Western Australia	32,260	78,420	1,610	45,610
Tasmania	36,880	57,890	3,870	31,980
Commonwealth	672,635	1,232,080	77,720	695,600
New Zealand	138,690	245,150	14,840	119,200
Australasia	811,325	1,477,230	92,560	814,800

The above figures, except those relating to old ages, are deduced from the proportions which existed at the last census; but there is reason to believe that these proportions have changed in consequence of the falling birth-rate, and that when the next census is taken the age constitution of the people will be found to have materially altered. The figures for the old ages represent the survivors of those who were 56 years and upwards at the census of 1891. It would appear that there are in the Commonwealth nearly 696,000 men who could be called upon to perform military service, as well as over 119,000 in New Zealand.

The female population of Australasia may be conveniently grouped into three divisions, namely, dependent ages, from infancy to 15 years; reproductive ages, from 15 to 45; and those over 45 years of age. The numbers of each class, as well as those of 65 years and upwards, in the several provinces at the close of 1899, are shown below :—

State.	Dependent Ages, up to 15 years.	Reproductive Ages, 15 and under 45.	Ages of 45 years and over.	Old Ages, 65 years and over.
New South Wales	259,350	291,350	76,945	16,250
Victoria	210,100	282,420	90,280	24,960
Queensland	91,640	100,470	22,950	4,090
South Australia	71,280	78,880	25,980	6,520
Western Australia	24,570	27,380	6,790	610
Tasmania	34,290	37,050	12,320	3,020
Commonwealth	691,230	817,550	235,265	55,450
New Zealand	136,010	170,680	51,130	9,470
Australasia	827,240	988,230	286,395	64,920

The above figures are based on the proportions existing at the last census, as in the case of the preceding table for males, and are open to question for the reasons specified in connection with that table.

Births.

The total number of births in each colony, and the rate per thousand of the population during the year 1899 are shown in the following table :—

State.	Births.			Birth-rate.
	Males.	Females.	Total.	
New South Wales	18,613	17,848	36,461	27·10
Victoria	15,785	15,223	31,008	26·69
Queensland	7,128	6,771	13,899	29·14
South Australia	4,852	4,570	9,422	25·61
Western Australia	2,636	2,538	5,174	30·51
Tasmania	2,415	2,259	4,674	26·00
New Zealand	9,724	9,111	18,835	25·11
Australasia	61,153	58,320	119,473	26·84

The birth-rate of Australasia in 1899 was identical with that of 1898, viz., 26·84. In Victoria, South Australia, and Western Australia there was an increase in the rate during 1899, but the other colonies still manifest a tendency to fall. For the year 1898 the birth-rates in the various colonies were, New South Wales 27·39, Victoria 25·97, Queensland 29·90, South Australia 24·71, Western Australia 30·10, Tasmania 26·26, and New Zealand 25·75.

The number of births in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the four years 1896–99, was as follows :—

State.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
New South Wales	79,958	92,643	106,543	127,572	158,965	188,300	197,566	146,456
Victoria	123,353	131,052	136,363	132,347	140,258	172,307	180,852	124,658
Queensland	11,761	22,622	29,279	37,535	48,979	70,150	72,863	56,162
South Australia	30,472	35,067	36,398	46,310	56,618	53,200	53,093	38,002
Western Australia	3,352	3,724	4,033	4,611	5,446	7,696	10,242	16,945
Tasmania	15,454	14,679	15,313	17,165	21,425	23,710	24,794	18,540
New Zealand	26,611	46,770	59,891	88,205	96,482	94,071	91,410	75,139
Australasia	290,961	346,557	387,820	453,745	528,173	609,434	630,820	475,882

The average birth-rates of each colony for the same periods were as follow :—

State.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
New South Wales	42·71	40·70	39·05	38·53	37·65	36·36	32·85	27·92
Victoria	43·30	39·27	35·69	31·43	30·76	32·72	31·08	26·77
Queensland	43·07	43·91	40·81	36·72	36·37	38·81	35·15	30·46
South Australia	44·14	40·60	37·24	38·28	38·52	34·48	31·24	26·24
Western Australia	39·07	33·86	31·30	32·97	34·57	36·88	30·77	28·05
Tasmania	33·80	29·65	29·72	31·54	35·02	34·59	32·18	27·01
New Zealand	38·22	42·28	40·02	41·32	36·50	31·22	27·66	25·78
Australasia	41·92	39·84	37·34	36·38	35·21	34·43	31·52	27·35

It is a matter of common knowledge that for some years past the birth-rate has been declining in the colonies, and so important is the subject not only as regards the growth of the population, but also as affecting general progress, that in 1899 the author made a special investigation into the question of childbirth in Australia, but more particularly with reference to New South Wales. The conclusions arrived at with respect to that colony, however, may be held to obtain for all the others, seeing that the conditions of living do not differ materially in any of them. During the course of the investigation it was found, first, that for all women the proportion of fertile marriages is decreasing ; second, that amongst fertile women the birth-rate is much reduced as compared with what it was twenty years ago, and third, that Australian-born women are not so fertile as the European women who have emigrated to the colonies, although how far this is due to natural sterility, and how far to prevention, it is impossible to say. It was also found that the decline had been persistent and regular since 1881, and this restriction of births in a young country like Australia, where immigration is discouraged, is a matter which must have far-reaching results, although its economic effects are only beginning to be seen, and should claim the serious consideration of all thoughtful people.

Particulars relating to illegitimate births will be found in the chapter headed "Social Condition."

Deaths.

The following table shows the total number of deaths and the rate per thousand of the population during the year 1899 :—

State.	Deaths.			Death-rate.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	9,131	6,770	15,901	12·62	10·89	11·82
Victoria	9,286	7,292	16,578	16·00	12·54	14·27
Queensland	3,943	2,201	6,144	14·90	10·36	12·88
South Australia	2,424	2,054	4,478	12·59	11·71	12·17
Western Australia	1,513	811	2,324	13·49	14·13	13·70
Tasmania	1,192	1,012	2,204	12·28	12·24	12·26
New Zealand	4,464	3,216	7,680	11·29	9·07	10·24
Australasia	31,953	23,356	55,309	13·51	11·20	12·43

The death-rates for 1899, with the exception of New Zealand, show a satisfactory decline as compared with those of 1898, but still they are not so low as those of 1897. The rate of 1898 for Australasia, which was 13·36, was abnormally high, and was due to the large number of deaths of young children from scarlet fever, measles, and whooping-cough, which were epidemic in the colonies in that year. The rates of

1898 are quoted for the sake of comparison, and were—New South Wales 12·60, Victoria 16·07, Queensland 13·40, South Australia 13·03, Western Australia 16·46, Tasmania 13·53, and New Zealand 9·84 per thousand. Comparing the death-rate of males and females separately, New Zealand shows the lowest rates amongst both sexes, and New South Wales, which has the lowest general rate but one, is only fourth amongst males and third amongst females, while Queensland, which has the third highest general rate, stands second amongst the female rates. Western Australia exhibits the very unusual occurrence of the female rate exceeding the male; this fact is difficult to account for, and seems to show that the female population is under-estimated.

The number of deaths in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the four years 1896–99, is shown in the following table :—

State.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
New South Wales ..	31,561	36,466	40,909	53,256	66,103	71,457	76,802	62,665
Victoria.....	49,452	55,136	59,759	62,811	66,811	84,648	82,056	66,115
Queensland	5,751	9,312	12,869	17,284	25,731	28,040	26,581	23,455
South Australia	10,840	12,963	15,475	18,026	21,616	19,361	20,535	17,337
Western Australia..	1,399	1,711	2,068	2,003	2,709	3,332	5,430	9,703
Tasmania	6,953	6,962	8,060	8,994	9,790	10,389	10,123	8,411
New Zealand	10,001	13,328	19,354	25,254	29,074	29,746	33,525	27,951
Australasia	115,957	135,878	158,494	187,628	221,834	246,973	255,052	215,637

The average death-rates of each colony for the periods shown in the above table are given below; but the statement does not afford a just comparison between the colonies, as no account is taken of the ages of the people :—

State.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
New South Wales ..	16·86	16·05	14·99	16·09	15·66	13·80	12·77	11·95
Victoria.....	17·36	16·52	15·64	14·92	14·65	16·07	14·10	14·19
Queensland	21·06	18·07	17·94	16·90	19·10	15·52	12·82	12·72
South Australia	15·70	15·01	15·83	14·90	14·71	12·55	12·08	11·97
Western Australia ..	16·31	15·55	16·03	14·32	17·19	15·97	16·31	16·06
Tasmania	15·20	14·06	15·64	16·52	16·00	15·16	13·14	12·25
New Zealand	14·36	12·05	12·93	11·83	11·00	9·87	10·14	9·59
Australasia	16·75	15·62	15·26	15·04	14·79	13·95	12·74	12·39

If this table be compared with that showing the birth-rates, it will be observed that the experience of Australasia corresponds with that of other countries, viz., that a low birth-rate and a low death-rate accompany each other, so that although the birth-rate has been declining it has had an effect in reducing the death-rate, and the balance in favour of births has not been reduced as much as it might have been. From the next table, which shows the mean natural increase in various countries during the decennial period 1889–98, it will be seen that the case of Australasia is much better than that of any of the countries of the United Kingdom or Europe, for notwithstanding that the birth-rate of these countries in some cases is higher, the death-rate is so much higher as to more than outweigh any advantage in that respect.

Country.	Birth-rate.	Death-rate.	Excess of Births per 1,000 Inhabitants.
New South Wales	31·76	12·63	19·13
Victoria	30·24	14·67	15·57
Queensland	34·46	13·23	21·23
South Australia	30·07	11·99	18·08
Western Australia	29·42	16·32	13·10
Tasmania	30·90	13·16	17·74
New Zealand	27·52	9·78	17·74
Australasia	30·68	12·85	17·83
England and Wales	30·28	18·35	11·93
Scotland	30·71	18·79	11·92
Ireland	22·98	18·11	4·87
United Kingdom	29·45	18·37	11·08
Denmark	30·42	17·80	12·62
Norway	30·24	16·50	13·74
Sweden	27·41	16·35	11·06
Austria	37·39	27·30	10·09
Hungary	40·95	30·58	10·37
Switzerland	28·20	19·69	8·51
German Empire	36·20	22·69	13·51
Prussia	36·90	22·26	14·64
The Netherlands	32·79	18·93	13·86
Belgium	29·10	19·42	9·68
France	22·41	21·67	0·74
Italy	36·90	24·94	11·96

If the year 1898 only had been taken as the basis of comparison, the gain by natural increase to Australasia would have been in some instances below that of the European countries, but the death-rate of 1898 in Australasia was abnormally high, and much above the average for the ten years.

Index of Mortality.

So far consideration has only been given to the actual death-rates as they are obtained by taking the proportion which the number of deaths bears to the number of inhabitants. It is well known, however, that the death-rate of a country is affected by more than the salubrity of its climate, the degree of perfection to which the sanitary condition of its cities and towns and villages has been brought, and the nature of the industrial pursuits of its people. It is known that the ages of the people considerably affect the death-rate of a country, that, for instance, one which has a large proportion of young people will, other things being equal, have a lower death-rate than another which has a comparatively large proportion of old persons, and it is this fact that statistical science now seeks to take into account in establishing the rates of mortality of the various countries of the world. In order to have a comparison of the mortality of the principal countries on a uniform basis, the International Statistical Institute, in its 1895 session, held at Berne, decided to recommend the population of Sweden, in five age-groups, as ascertained at the census of 1890, as the standard population, by which the index of mortality should be calculated. Applying the co-efficient of mortality in each age-group in the colonies to the age constitution of the standard population, the "index of mortality," as distinguished from the actual "death-rate," is found as given below for each of the five years 1894–98. How greatly the ages of the people of a country affect its mortality will be evident from the fact that whereas in 1898 the death-rates of the colonies ranged from 9·84 in New Zealand to 16·46 in Western Australia, a difference of 6·62 per thousand, the range of the indexes of mortality was only 4·61 per thousand, namely, from 14·94 in New Zealand to 19·55 in Victoria.

State.	1894.	1895.	1896.	1897.	1898.
New South Wales	16·32	15·69	16·45	14·97	17·03
Victoria	15·96	16·39	16·48	16·00	19·55
Queensland	16·29	15·21	16·73	16·11	19·07
South Australia	14·61	14·36	14·44	14·55	16·35
Western Australia.....	16·65	18·86	17·48	18·47	17·05
Tasmania	14·74	13·40	13·89	13·66	15·86
New Zealand	14·44	13·98	13·01	13·53	14·94
Australasia	15·68	15·49	15·71	15·17	17·42

It should be remembered, in comparing these indexes of mortality, that the age constitution of each colony during each of the five years taken has been assumed to be that which existed at the census of 1891; but, as has been pointed out before, there is little doubt that this has since changed, and the comparison is probably most unfair to Victoria.

Ages at Death.

A detailed statement of the ages at death of the males who died during the year 1898 in the various colonies is given below. The figures for South Australia in this and subsequent detailed tables refer to the province proper exclusive of the Northern Territory.

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Total.
Under 1 year	2,431	2,228	804	726	443	312	860	7,804
1 and under 2 years	584	627	196	133	101	67	117	1,825
2 ,, 3 ,,	184	204	79	40	26	24	52	609
3 ,, 4 ,,	102	119	62	29	21	3	45	381
4 ,, 5 ,,	90	105	36	23	11	12	24	301
5 ,, 10 ,,	233	322	114	64	35	31	81	880
10 ,, 15 ,,	173	162	62	49	23	30	78	577
15 ,, 20 ,,	198	222	101	69	30	35	118	773
20 ,, 25 ,,	264	300	176	73	122	49	171	1,155
25 ,, 30 ,,	314	329	198	85	127	40	162	1,255
30 ,, 35 ,,	339	359	212	85	130	40	154	1,319
35 ,, 40 ,,	415	379	213	102	134	39	150	1,432
40 ,, 45 ,,	398	329	205	99	100	42	152	1,325
45 ,, 50 ,,	371	329	194	100	83	42	180	1,299
50 ,, 55 ,,	401	315	184	99	66	49	216	1,330
55 ,, 60 ,,	462	436	196	106	62	25	299	1,586
60 ,, 65 ,,	572	667	195	131	65	43	335	2,008
65 ,, 70 ,,	605	934	189	128	79	75	384	2,394
70 ,, 75 ,,	549	831	141	136	49	93	278	2,077
75 years and upwards	945	1,326	204	305	66	259	424	3,529
Unspecified	6	10	10	2	20	8	....	56
Total	9,636	10,533	3,771	2,584	1,793	1,318	4,280	33,915

Similar information respecting the deaths of females in 1898 is given in the following table :—

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Total.
Under 1 year	1,987	1,819	736	525	382	219	650	6,318
1 and under 2 years	516	623	178	132	83	52	83	1,667
2 ,, 3 ,,	201	178	80	35	21	21	39	575
3 ,, 4 ,,	107	94	67	23	12	12	27	342
4 ,, 5 ,,	86	91	43	21	14	8	23	286
5 ,, 10 ,,	229	315	112	65	37	33	85	876
10 ,, 15 ,,	146	162	65	48	22	22	64	529
15 ,, 20 ,,	218	241	61	67	20	50	145	802
20 ,, 25 ,,	286	279	84	87	62	39	149	986
25 ,, 30 ,,	290	379	91	80	55	48	128	1,071
30 ,, 35 ,,	307	370	96	83	46	44	115	1,061
35 ,, 40 ,,	302	372	108	88	33	37	121	1,061
40 ,, 45 ,,	225	288	106	69	22	32	130	872
45 ,, 50 ,,	246	237	66	60	12	31	124	776
50 ,, 55 ,,	206	253	76	55	19	27	112	748
55 ,, 60 ,,	218	298	85	83	21	31	142	878
60 ,, 65 ,,	289	430	107	96	13	44	158	1,137
65 ,, 70 ,,	272	487	98	100	14	60	190	1,221
70 ,, 75 ,,	259	425	66	123	11	65	137	1,086
75 and upwards	634	818	146	251	23	165	342	2,379
Unspecified	1	3	1	.....	1	1	....	7
Total	7,025	8,162	2,472	2,091	923	1,041	2,964	24,678

The next table shows the ages of all the persons who died during 1898 :—

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Under 1 year	4,418	4,047	1,540	1,251	825	531	1,510	14,122
1 and under 2 years....	1,100	1,250	374	265	184	119	200	3,492
2 ,, 3 ,, ...	385	382	159	75	47	45	91	1,184
3 ,, 4 ,, ...	209	213	129	52	33	15	72	723
4 ,, 5 ,, ...	176	196	79	44	25	20	47	587
5 ,, 10 ,, ...	462	637	226	129	72	64	166	1,756
10 ,, 15 ,, ...	319	324	127	97	45	52	142	1,106
15 ,, 20 ,, ...	416	463	162	136	50	85	263	1,575
20 ,, 25 ,, ...	550	579	260	160	184	88	320	2,141
25 ,, 30 ,, ...	604	708	289	165	182	88	290	2,326
30 ,, 35 ,, ...	646	729	308	168	176	84	269	2,380
35 ,, 40 ,, ...	717	751	321	190	167	76	271	2,493
40 ,, 45 ,, ...	623	617	311	168	122	74	282	2,197
45 ,, 50 ,, ...	617	566	260	160	95	73	304	2,075
50 ,, 55 ,, ...	607	568	260	154	85	76	328	2,078
55 ,, 60 ,, ...	680	734	281	189	83	56	441	2,464
60 ,, 65 ,, ...	861	1,097	302	227	78	87	493	3,145
65 ,, 70 ,, ...	877	1,421	287	228	93	135	574	3,615
70 ,, 75 ,, ...	808	1,256	207	259	60	158	415	3,163
75 and upwards	1,579	2,144	350	556	89	424	766	5,908
Unspecified	7	13	11	2	21	9	....	63
Total	16,661	18,695	6,243	4,675	2,716	2,359	7,244	58,593

The above tables, showing the ages at death, are not of much use for comparative purposes, since the rates for each age are not shown. It is, unfortunately, not possible to quote these, as the numbers living at each age are not known with any exactitude, the only figures available being those of the last census, since which time the age constitution of the populations has changed materially. It is, however, possible to give the mortality of infants under 1 year of age, and this may be measured accurately by comparing the deaths with the number of births ; moreover, this is a most sensitive and reliable test of the healthiness and sanitary condition of a country, since at this early age children are most susceptible to the attacks of disease. The number under 1 year who died in 1898 was 14,122, or 119·91 per 1,000 births,

while in 1899 there was a fall to 13,153, or 113·13 per 1,000 births. The following table shows for each colony the number of deaths of children under 1 year of age, and the rate per 1,000 births, since 1870, arranged in five-year periods :—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
Deaths under 1 Year.						
New South Wales	11,036	14,626	19,709	21,586	21,930	16,983
Victoria	16,981	15,865	17,043	22,582	20,221	14,363
Queensland	3,596	5,068	6,732	8,339	7,496	5,881
South Australia	5,758	6,516	7,594	5,593	5,227	4,355
Western Australia	.....	.....	.....	939	1,332	2,800
Tasmania	1,560	1,830	2,331	2,437	2,337	1,895
New Zealand	6,390	8,432	8,733	7,924	8,005	6,109
Australasia	45,321	52,337	62,142	69,400	66,548	52,386
Rate per 1,000 Births.						
New South Wales	103·58	114·65	123·98	114·64	111·00	115·98
Victoria	124·53	119·87	121·51	131·06	111·81	115·21
Queensland	122·82	135·02	137·45	118·87	102·88	104·71
South Australia	158·20	140·70	134·13	105·13	98·67	114·94
Western Australia	.....	.....	.....	109·15	130·05	165·24
Tasmania	101·87	106·61	108·75	102·78	94·26	102·21
New Zealand	106·69	95·60	90·51	84·23	87·57	81·30
Australasia	118·09	116·53	118·88	113·71	105·51	110·11

In spite of all the sanitary improvements that have been effected in recent years, the rate does not seem to have decreased very appreciably in any of the colonies except in South Australia and in New Zealand. In South Australia the rate was very high in the earlier years, the reason given, being that the deaths of several children 1 year old were wrongly included by the registering officers with those under 1 year. In every province except New Zealand, where the mortality has declined more or less regularly over the whole period, the death-rates of infants have risen during the last period ; in Western Australia the increase has been very serious, to the extent of more than one-fourth in five years.

Causes of Death.

The system of classifying the causes of death adopted in the Australasian colonies is that arranged by Dr. William Ogle on the basis of the older system of Dr. William Farr, his predecessor as Superintendent of the Statistical Department of the Registrar-General's Office, England. Under this classification deaths are divided into eight classes, namely,

deaths from specific febrile or zymotic diseases, from parasitic diseases, from dietetic diseases, from constitutional diseases, from developmental diseases, from local diseases, from violence, and from ill-defined or unspecified causes. The following were the assigned causes of death of the 33,915 males who died in the colonies during 1898 :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Specific febrile or zymotic diseases—								
Miasmatic diseases	875	954	497	204	271	106	253	3,160
Diarrhœal diseases	402	407	192	163	157	71	162	1,554
Malarial diseases	15	2	22	2	20	....	....	61
Zoogenous diseases	5	....	....	....	....	....	....	5
Venereal diseases	26	42	25	4	7	4	16	124
Septic diseases	54	39	14	16	10	1	19	153
Total	1,377	1,444	750	389	465	182	450	5,057
Parasitic diseases	45	33	10	4	2	7	15	116
Dietetic diseases	127	134	73	25	41	8	44	452
Constitutional diseases	1,386	1,668	604	348	139	155	742	5,042
Developmental diseases	942	955	195	295	98	241	343	3,069
Local diseases—								
Diseases of nervous system	934	854	346	234	120	132	465	3,085
Diseases of organs of special sense	12	13	7	3	2	3	6	46
Diseases of circulatory system	788	979	287	235	112	113	489	3,003
Diseases of respiratory system	1,296	1,464	428	269	189	133	525	4,304
Diseases of digestive system	997	1,296	406	238	250	113	345	3,645
Diseases of lymphatic system and ductless glands	10	13	7	6	3	2	13	54
Diseases of urinary system	439	443	119	109	58	39	172	1,379
Diseases of organs of generation	3	....	2	1	....	1	....	7
Diseases of organs of locomotion	20	32	11	16	4	5	14	102
Diseases of integumentary system	23	32	13	8	1	4	12	93
Total	4,522	5,126	1,626	1,119	739	545	2,041	15,718
Violence—								
Accident or negligence	668	579	369	182	162	98	385	2,443
Homicide	22	12	10	2	....	2	4	52
Suicide	129	102	66	36	27	7	66	433
Execution	1	1	....	....	....	....	2	4
Violent deaths not classified	6	....	....	....	....	....	....	6
Total	826	694	445	220	189	107	457	2,938
Ill-defined and not specified causes	411	479	68	184	120	73	188	1,523
Grand Total	9,636	10,533	3,771	2,584	1,793	1,318	4,280	33,915

It will be seen that local diseases accounted for nearly one-half of the deaths of males, viz., for 15,718, out of 33,915, which is equal to a rate of 67·46 per 10,000 males living. These diseases were far more prevalent in Victoria, where the rate was 88·12 per 10,000, than in any other colony; the nearest approach being in Western Australia, where the rate reached 66·45. The three colonies, New South Wales,

Queensland, and South Australia, with rates of 63·53, 62·89, and 60·56, were close together, while Tasmania followed with 58·33, and New Zealand with 52·55 per 10,000.

Next to local diseases, the febrile or zymotic diseases were the most fruitful sources of death, being responsible for 5,057, equal to 21·70 per 10,000. In Western Australia these diseases flourished to an alarming extent, causing deaths at the rate of 41·81 per 10,000 males living, due to the large number of deaths from typhoid fever. The next colony to this was Queensland, with 29·01, the other colonies showing rates ranging from 11·59 in New Zealand to 24·82 in Victoria.

Constitutional diseases come next with 5,042 deaths, or 21·64 per 10,000, Victoria claiming most deaths with a rate of 28·67, largely caused by the great number of deaths from phthisis ; the other colonies follow at fairly regular intervals, with rates increasing from 12·50 in Western Australia to 23·36 in Queensland.

Developmental diseases were assigned as the cause of death in 3,069 cases, or at the rate of 13·17 deaths per 10,000 living. These diseases claimed, proportionally, most victims in Tasmania, where the rate was 25·79, the chief contributing cause being "old age," and as Tasmania has proportionately more old people than any of the other colonies, the high rate is, to some extent, accounted for. The next lowest rate is Queensland, with 7·54, followed by Western Australia with 8·81, and New Zealand with 8·83, while in New South Wales the rate is 13·23, in South Australia 15·96, and in Victoria 16·42.

The deaths from parasitic and dietetic diseases numbered only 568 males, or 2·44 per 10,000 living in Australasia, the variation in the rates for the respective colonies being comparatively small.

No less than 2,938 males, or 12·61 per 10,000, met with violent deaths, the sparsely populated provinces of Queensland and Western Australia showing the highest rates with 17·21 and 17·00 respectively. The rates for the other colonies were fairly uniform, ranging from 11·45 in Tasmania to 11·93 in Victoria.

In 1,523 cases, or nearly 5 per cent. of the total, the causes of death were either not specified, or so ill-defined that classification was impossible.

A classification, similar to that of males, of the causes of death of the 24,678 females who died during 1898 gives the following results :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Specific febrile or zymotic diseases—								
Miasmatic diseases	848	860	467	203	113	97	197	2,785
Diarrhœal diseases	381	339	151	139	78	37	113	1,238
Malarial diseases	1	....	7	....	1	....	....	9
Venereal diseases	22	28	6	2	4	....	13	75
Septic diseases	125	109	21	39	15	6	36	351
Total	1,377	1,336	652	383	211	140	359	4,458

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Parasitic diseases	36	33	7	3	2	....	12	93
Dietetic diseases	50	81	38	17	12	....	20	218
Constitutional diseases	1,041	1,408	317	315	75	163	643	3,962
Developmental diseases	636	610	155	246	65	159	305	2,176
Local diseases—								
Diseases of nervous system	656	713	223	182	59	112	315	2,260
Diseases of organs of special sense	7	14	3	....	1	1	7	33
Diseases of circulatory system	450	726	152	192	41	91	287	1,939
Diseases of respiratory system	891	967	262	189	92	106	311	2,818
Diseases of digestive system	787	1,184	329	191	188	81	250	3,010
Diseases of lymphatic system and ductless glands	6	10	4	10	....	5	24	59
Diseases of urinary system	191	210	65	59	18	21	102	666
Diseases of organs of generation	47	35	19	16	5	4	26	152
Diseases of parturition	164	118	60	29	15	25	72	483
Diseases of organs of locomotion	7	24	8	11	....	2	10	62
Diseases of integumentary system	13	25	11	8	1	....	5	63
Total	3,219	4,026	1,136	887	420	448	1,409	11,545
Violence—								
Accident or negligence	240	210	108	88	34	38	78	796
Homicide	19	10	5	5	4	5	2	50
Suicide	36	27	12	5	3	1	10	94
Total	295	247	125	98	41	44	90	940
Ill-defined and not specified causes	371	421	42	142	97	87	126	1,286
Grand Total	7,025	8,162	2,472	2,091	923	1,041	2,964	24,678

Almost all that has been said in regard to the causes of the deaths of males may, with slight variations, be repeated with equal truth concerning the deaths of females. With a few exceptions, the rates of death from the various causes were less amongst females than amongst males. The exceptions were that in Western Australia, deaths from local diseases amongst females were 78·04 per 10,000, principally owing to the large number of deaths from diseases of the digestive system, whilst amongst males the rate was 66·45 per 10,000; and that in Queensland with a rate of 31·43, in New South Wales with 22·55, and in South Australia with 22·07 per 10,000, zymotic diseases were more fatal to females than to males. The general rate for these diseases for Australasia was identical for both males and females, viz., 21·70 per 10,000.

Deaths from violence were not nearly so frequent amongst females, the rate being only about one-third that of males, viz., 4·58, ranging from 2·59 in New Zealand to 7·62 in Western Australia. The number of females who died from ill-defined causes was very nearly the same as that of males—the rate being 6·26 per 10,000. In the following table

the general rates for deaths from each class of diseases in Australasia during 1898, amongst males, females, and all persons are shown :—

DEATH-RATE per 10,000 Living.

Diseases.	Males.	Females.	Total.
Zymotic	21·70	21·70	21·70
Parasitic	0·50	0·45	0·48
Dietetic	1·94	1·06	1·53
Constitutional	21·64	19·29	20·54
Developmental	13·17	10·59	11·96
Local	67·46	56·20	62·18
Violent	12·61	4·58	8·85
Ill-defined	6·54	6·26	6·41

The next table, which combines the deaths of males and females previously shown, gives the causes of death of all persons who died during 1898 :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Specific febrile or zymotic diseases—								
Miasmatic diseases	1,723	1,814	964	407	384	203	450	5,945
Diarrhœal diseases	783	746	343	302	235	108	275	2,792
Malarial diseases	16	2	29	2	21	....	..	70
Zoogenous diseases	5	..	....	..	..	....	..	5
Venereal diseases	48	70	31	6	11	4	29	199
Septic diseases	179	148	35	55	25	7	55	504
Total	2,754	2,780	1,402	772	676	322	809	9,515
Parasitic diseases	81	66	17	7	4	7	27	209
Dietetic diseases	177	215	111	42	53	8	64	670
Constitutional diseases	2,427	3,076	921	663	214	318	1,385	9,004
Developmental diseases	1,578	1,565	350	541	163	400	648	5,245
Local Diseases—								
Diseases of nervous system	1,590	1,567	569	416	179	244	780	5,345
Diseases of organs of special sense	19	27	10	3	3	4	13	79
Diseases of circulatory system	1,238	1,705	439	427	153	204	776	4,942
Diseases of respiratory system	2,187	2,431	690	458	281	239	836	7,122
Diseases of digestive system	1,784	2,480	735	429	438	194	595	6,655
Diseases of lymphatic system and ductless glands	16	23	11	16	3	7	37	113
Diseases of urinary system	630	653	184	168	76	60	274	2,045
Diseases of organs of generation	50	35	21	17	5	5	26	159
Diseases of parturition	164	118	60	29	15	25	72	483
Diseases of organs of locomotion	27	56	19	27	4	7	24	164
Diseases of integumentary system	36	57	24	16	2	4	17	156
Total	7,741	9,152	2,762	2,006	1,159	993	3,450	27,263
Violence—								
Accident or negligence	908	789	477	270	196	136	463	3,239
Homicide	41	22	15	7	4	7	6	102
Suicide	165	129	78	41	30	8	76	527
Execution	1	1	....	..	..	....	2	4
Violent deaths not classified	6	..	....	..	..	....	..	6
Total	1,121	941	570	318	230	151	547	3,878
Ill-defined and not specified causes	782	900	110	326	217	160	314	2,809
Grand Total	16,661	18,695	6,243	4,675	2,716	2,359	7,244	58,593

Specific Febrile or Zymotic Diseases.

The deaths from specific febrile or zymotic diseases were very numerous in 1898, including 16·24 per cent. of the total causes, and representing 21·70 deaths per 10,000 of the population. Under this class are included the highly infectious diseases—measles, scarlet fever, whooping-cough, and diphtheria—which are especially fatal to children, and which together carried off 6·62 per 10,000 of the whole population during 1898; diarrhœal diseases, chiefly fatal to persons at the extremes of life; and typhoid (enteric) fever, whose ravages are very severe.

It would be interesting to compare the fatality of these diseases in the various colonies, stated in proportion to the number of cases occurring, but unfortunately the necessary information is lacking. In some of the colonies legal enactments provide for the notification of infectious diseases, but they are not rigidly enforced, and doubtless many cases escape notice.

In New South Wales, since the beginning of 1898, under the provisions of the Public Health Act of 1896, notification of the three diseases scarlet fever, diphtheria, and typhoid has been compulsory, and careful record has been kept of the number of cases and deaths, the averages for the two years 1898 and 1899 being shown below:—

Disease.	Number of cases notified.	Number of Deaths.	Fatality per cent.
Scarlet Fever	3,865	34	0·9
Diphtheria	1,117	85	7·6
Typhoid	3,042	248	8·2

The number of deaths shown above differs from the number registered, since the Board of Health only accepts medically certified cases. The experience of London during the nine years 1891-99 is also given.

Averages of nine years, 1891-99.

Disease.	Number of cases notified.	Number of Deaths.	Fatality per cent.
Scarlet Fever	21,973	872	4·0
Diphtheria	11,646	2,259	19·4
Typhoid	3,432	599	17·4

Measles.

Measles, which is mainly a children's disease, was the cause in 1898 of the deaths of 1,507 persons, equal to a rate of 3·44 per 10,000 living. The following tables show the number of deaths in each colony from this disease, the death-rate per 10,000 living, and the proportion per cent. of deaths from this cause to total deaths in five-year periods since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
Number of Deaths.						
New South Wales	.....	311	200	293	885	516
Victoria..... ...	1,809	271	386	148	696	681
Queensland	179	36	102	4	302	138
South Australia	356	18	240	8	291	54
Western Australia	.....	1	129	nil.	27	35
Tasmania	132	3	66	1	49	46
New Zealand	*359	10	246	85	526	58
Australasia	.....	650	1,369	539	2,776	1,528
Death-rate per 10,000 living.						
New South Wales	.....	0·94	0·47	0·57	1·47	1·32
Victoria	4·73	0·66	0·81	0·28	1·20	1·95
Queensland	2·50	0·35	0·76	0·02	1·46	1·01
South Australia	3·64	0·15	1·63	0·05	1·74	0·51
Western Australia	.....	0·07	8·19	0·00	0·81	0 81
Tasmania	2·56	0·06	1·08	0·01	0·64	0·91
New Zealand	*2·90	0·05	0·93	0·28	1·59	0·27
Australasia	.....	0·52	0·91	0·30	1·39	1·18
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	.....	0·58	0·30	0·41	1·15	1·10
Victoria	3·03	0·43	0·58	0·17	0·85	1·37
Queensland	1·39	0·21	0·40	0·01	1·14	0·80
South Australia	2·30	0·10	1·11	0·04	1·43	0·43
Western Australia	.....	0·05	4·76	0·00	0·50	0·47
Tasmania	1·64	0·03	0·67	0·01	0·48	0·74
New Zealand.....	*2·15	0·04	0·85	0·29	1·57	0·29
Australasia	.....	0·35	0·62	0·22	1·09	0·95

* Four years, 1872-75.

With regard to the diseases which are almost solely confined to children, the true rates are somewhat obscured by stating the proportion of deaths to the whole population, since the prevalence of the diseases will vary in each colony according to proportional number of young children in each. It has, however, been necessary to state them as above, because there is no means of making an accurate estimate of the numbers living at the ages most affected. Comparing the rates as they appear, it will be seen that measles has been more prevalent since 1891 than during the preceding fifteen years, and that it seems to be most common in the first four colonies shown in the table. Although the disease is in evidence every year, it usually occurs as an epidemic, and, according to the records, the outbreaks occur with more or less regularity and severity about every five years. Measles was epidemic in nearly all the colonies in 1875 (when the attack was very severe), in 1880, in 1884 (when Western Australia suffered heavily), in 1889, in 1893, and in 1898.

Scarlet Fever.

Scarlet fever was epidemic in 1898, the deaths resulting from it numbering 236, or at the rate of 0·54 per 10,000. In the table below is shown the number of deaths in each colony, the rates, and the proportion of total deaths, arranged quinquennially since 1870 :—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
Number of Deaths.						
New South Wales	.....	1,295	476	404	460	210
Victoria	1,455	2,646	282	148	172	173
Queensland	77	37	19	73	31	88
South Australia	626	520	141	27	56	26
Western Australia	.....	.....	.....	nil.	1	2
Tasmania	72	304	49	9	8	14
New Zealand	*58	383	312	96	40	8
Australasia	.....	5,185	1,279	757	768	521
Death-rate per 10,000 living.						
New South Wales	.....	3·91	1·13	0·78	0·76	0·54
Victoria	3·81	6·44	0·59	0·28	0·30	0·50
Queensland	1·07	0·36	0·14	0·40	0·15	0·64
South Australia	6·40	4·30	0·96	0·17	0·33	0·24
Western Australia	.....	.....	.....	0·00	0·03	0·05
Tasmania	1·40	5·59	0·80	0·13	0·08	0·28
New Zealand	*0·47	1·79	1·18	0·32	0·12	0·04
Australasia	.....	4·20	0·86	0·43	0·38	0·40

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
	Proportion per cent. of Deaths to Total Deaths.					
New South Wales	.....	2·43	0·72	0·57	0·60	0·45
Victoria	2·43	4·21	0·42	0·17	0·21	0·35
Queensland	0·60	0·21	0·07	0·26	0·12	0·51
South Australia	4·05	2·88	0·65	0·14	0·27	0·20
Western Australia	.....	.....	.....	0·00	0·02	0·03
Tasmania	0·89	3·38	0·50	0·09	0·08	0·23
New Zealand	*0·35	1·52	1·07	0·32	0·12	0·04
Australasia	.....	2·79	0·58	0·31	0·30	0·33

* Four years, 1872–75.

The rate of mortality from scarlet fever for the first ten years shown in the table was much higher than that recorded for measles, but, in spite of the highly infectious nature and difficulty of isolation of the former disease, the death-rate has since been consistently lower than that of the latter. From 1871 to 1880 the rate of mortality from scarlet fever was high, but during the next five years a great decrease was manifested, and later there was a further decline, while during the last thirteen years the rate has been practically constant, but with a tendency to rise in Victoria, Queensland, and Tasmania. In Victoria the extremely high rate for 1876–80 was caused by a very virulent outbreak of the disease in 1876, and in Tasmania an outbreak in 1877 largely increased the rate; in fact, during the three years 1875, 1876, and 1877 all the colonies were more or less affected by an epidemic of scarlet fever. In Queensland the disease has never been very prevalent, and in Western Australia it is virtually unknown.

Whooping-cough.

A curious fact in connection with whooping-cough, the third of the diseases of infancy and childhood, is that the mortality resulting from it is higher in the case of girls than of boys. During 1898 whooping-cough was responsible for 578 deaths (245 males and 333 females), equal to 1·32 deaths per 10,000 of the population, the male rate being 1·05 and the female 1·62. The table below shows the number of deaths in

each colony since 1870, the rates and the proportion of total deaths :—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
Number of Deaths.						
New South Wales	.....	676	632	979	1,157	354
Victoria	1,053	921	701	691	851	149
Queensland	117	198	184	306	381	253
South Australia	181	211	341	263	279	129
Western Australia	.....	nil.	19	65	57	20
Tasmania	99	84	59	89	79	14
New Zealand	*465	589	592	443	752	32
Australasia	.....	2,679	2,528	2,836	3,556	951
Death-rates per 10,000 living.						
New South Wales	.....	2·04	1·50	1·89	1·92	0·91
Victoria	2·76	2·24	1·47	1·31	1·46	0·43
Queensland	1·63	1·94	1·37	1·69	1·84	1·85
South Australia	1·85	1·74	2·32	1·70	1·67	1·21
Western Australia	.....	0·00	1·21	3·12	1·71	0·46
Tasmania	1·92	1·54	0·96	1·30	1·03	0·28
New Zealand	*3·75	2·76	2·24	1·47	2·28	0·15
Australasia	.....	2·15	1·69	1·60	1·78	0·74
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	.....	1·27	0·96	1·37	1·51	0·76
Victoria	1·76	1·47	1·05	0·82	1·04	0·30
Queensland	0·91	1·15	0·72	1·09	1·43	1·46
South Australia	1·17	1·17	1·58	2·94	1·37	1·02
Western Australia	.....	0·00	0·70	1·95	1·05	0·27
Tasmania	1·23	0·93	0·60	0·86	0·78	0·23
New Zealand	*2·78	2·33	2·04	1·49	2·24	0·16
Australasia	.....	1·43	1·14	1·15	1·40	0·59

* Four years, 1872–75.

The death-rate from whooping-cough, which has never been remarkably high, declined after the second quinquennium (1876–80), and thenceforward remained fairly constant during the next fifteen years. For the last three years, however, the returns show a further gratifying decrease, in spite of the fact that the disease was mildly epidemic in most of the colonies in 1898. Generally speaking, whooping-cough seems to have been most prevalent in New South Wales, South Australia, and New Zealand; but, on the whole, the rates up to the last period are very even amongst themselves in all the colonies. In Western Australia the rate rose regularly to a maximum during 1886–90—a very severe epidemic being experienced in 1886—and then declined.

Diphtheria.

Diphtheria, the last of the febrile diseases mentioned which mainly affect children, caused, in 1898, a total of 578 deaths, at the rate of 1·32 per 10,000 persons living. In the following table is shown the number of deaths in each colony, the death-rate, and the proportion borne to total deaths since 1870 :—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
Number of Deaths.						
New South Wales	.....	1,109	1,005	1,325	1,753	461
Victoria	1,609	1,431	681	1,885	994	596
Queensland	246	170	224	530	551	143
South Australia	379	329	387	570	513	81
Western Australia	.....	11	28	19	38	69
Tasmania	124	329	96	182	208	36
New Zealand	*535	316	525	542	577	168
Australasia	.....	3,695	2,946	5,053	4,634	1,554
Death-rate per 10,000 living.						
New South Wales	.....	3·35	2·39	2·56	2·91	1·18
Victoria	4·21	3·48	1·43	3·58	1·71	1·71
Queensland	3·43	1·66	1·66	2·93	2·66	1·05
South Australia	3·88	2·72	2·63	3·69	3·06	0·76
Western Australia	.....	0·79	1·78	0·91	1·14	1·59
Tasmania	2·41	6·05	1·57	2·66	2·70	0·71
New Zealand	*4·32	1·48	1·99	1·80	1·75	0·78
Australasia	.....	2·96	1·96	2·85	2·32	1·20
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	.....	2·08	1·52	1·85	2·28	0·99
Victoria	2·69	2·28	1·02	2·23	1·21	1·20
Queensland	1·91	0·98	0·87	1·89	2·07	0·83
South Australia	2·45	1·83	1·79	2·94	2·52	0·64
Western Australia	.....	0·55	1·03	0·57	0·70	0·94
Tasmania	1·54	3·66	0·98	1·75	2·05	0·58
New Zealand	*3·20	1·25	1·81	1·82	1·72	0·83
Australasia	.....	1·97	1·33	2·05	1·82	0·97

* Four years, 1872–75.

The present rates for diphtheria, as compared with those of twenty or twenty-five years ago, show a decrease. The decline, however, has been by no means regular, owing to the fact that this disease, in common with the others affecting children, sometimes occurs as an epidemic. Thus the increase in the rates during 1886–90 over those prevailing in the previous five years was due to an epidemic in nearly all the provinces in 1890.

The decreased mortality during the last twenty years, from the four diseases just mentioned, together with croup, represents a gain of about 8 children to the population in every 10,000 persons living. This improvement is very gratifying, since it may be taken that cases of these diseases, which are particularly liable to be attended with dangerous after-effects in the shape of lung and other local troubles, are not so numerous, and that in consequence the general health of the people is better. Tasmania seems to have suffered most from diphtheria, followed closely by Victoria, South Australia, and New South Wales, while West Australia has been the most immune. The rate in Tasmania during 1876–80 was very heavy, each one of the five years showing a high rate, which suddenly decreased in 1881, and has remained much lower ever since.

Croup.

Croup, although classed as a disease of the respiratory system, was formerly classified with the zymotic diseases, and is included here on account of its similarity to diphtheria, and the confusion which often arises between them, and of the deaths set down to a combination of both. It is a disease that may be said to affect children only, and in 1898 caused the death of 212, or 0·48 per 10,000 of the population. In the subsequent table is shown the number of deaths in each colony, the death-rate, and the proportion to total deaths since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
			Number of Deaths.			
New South Wales	.....	968	971	951	683	214
Victoria	647	1,250	795	1,209	458	144
Queensland	273	324	483	382	239	80
South Australia	258	330	443	192	145	30
Western Australia	.....	24	31	45	64	21
Tasmania	80	76	113	112	101	18
New Zealand	*281	277	334	340	304	121
Australasia	.....	3,249	3,170	3,231	1,994	628

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
Death-rate per 10,000 living.						
New South Wales	.....	2·92	2·31	1·84	1·14	0·55
Victoria	1·69	3·04	1·66	2·30	0·79	0·41
Queensland	3·81	3·17	3·59	2·11	1·15	0·59
South Australia	2·64	2·74	3·01	1·24	0·87	0·28
Western Australia	.....	1·72	1·97	2·16	1·92	0·48
Tasmania	1·55	1·40	1·85	1·63	1·31	0·36
New Zealand	*2·27	1·30	1·26	1·13	0·92	0·56
Australasia	.....	2·61	2·11	1·83	1·00	0·49
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	.....	1·82	1·47	1·33	0·89	0·46
Victoria	1·08	1·99	1·19	1·43	0·56	0·29
Queensland	2·12	1·87	1·88	1·36	0·90	0·46
South Australia	1·67	1·83	2·05	0·99	0·71	0·24
Western Australia	.....	1·20	1·14	1·35	1·18	0·28
Tasmania	0·99	0·85	1·15	1·08	1·00	0·29
New Zealand	*1·68	1·10	1·15	1·14	0·91	0·60
Australasia	.....	1·73	1·43	1·31	0·78	0·39

* Four years, 1872-75.

Generally speaking, deaths from this disease show a steady and consistent fall from the earliest period, although in some of the colonies, especially Victoria and South Australia, the rates fluctuate slightly. The greatest decline has taken place in New South Wales, Victoria, Queensland, and South Australia, until at the present time croup is about equally prevalent in all the provinces. If croup and diphtheria be taken together, as they usually are, the rates generally have declined to the extent of nearly 4 per 1,000 during the last twenty years.

Diarrhœal Diseases.

Diarrhœal diseases, comprising cholera, diarrhœa, and dysentery, carry off mostly young children and old persons. In 1898 these diseases were fatal to 2,792 persons, equal to a death-rate of 6·37 per 10,000 living.

The number of deaths in each colony, the rates, and the proportion of total deaths in quinquennial periods since 1870, are shown below.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
Number of Deaths.						
New South Wales	.....	3,913	4,775	4,323	3,794	2,482
Victoria	6,030	5,006	4,886	5,489	3,290	1,770
Queensland	1,618	2,469	3,833	2,865	2,125	1,131
South Australia	1,628	1,620	2,105	1,388	1,079	799
Western Australia	.....	140	106	251	323	528
Tasmania	437	512	474	605	354	208
New Zealand	*1,528	2,375	1,879	1,789	1,280	866
Australasia	.....	16,035	18,058	16,710	12,245	7,784
Death-rates per 10,000 living.						
New South Wales	.....	11·82	11·34	8·34	6·31	6·36
Victoria	15·78	12·18	10·23	10·42	5·65	5·06
Queensland	22·56	24·15	28·46	15·85	10·25	8·27
South Australia	16·65	13·39	14·32	8·99	6·44	7·49
Western Australia	.....	10·01	6·73	12·03	9·70	12·15
Tasmania	8·48	9·41	7·75	8·83	4·59	4·11
New Zealand	*12·33	11·13	7·11	5·94	3·87	4·00
Australasia	.....	12·86	12·04	9·44	6·13	6·02
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	.....	7·35	7·22	6·05	4·94	5·30
Victoria	10·09	7·97	7·31	5·30	4·01	3·57
Queensland	12·57	14·28	14·90	10·22	7·99	6·53
South Australia	10·52	8·99	9·74	7·17	5·30	6·30
Western Australia	.....	6·99	3·91	7·53	5·95	7·16
Tasmania	5·42	5·69	4·84	5·82	3·50	3·35
New Zealand	*9·14	9·40	6·46	6·01	3·82	4·27
Australasia	.....	8·55	8·14	6·77	4·80	4·86

* Four years, 1872-75.

The death-rates generally show a marked tendency to decline, having decreased by over 50 per cent. during the last twenty years. The most noticeable improvement is in the case of Queensland, where, during the earlier periods, a large number of men, in the outlying portions of the colony, died from dysentery, probably brought on by impure water, improper food, and insufficient protection from the weather, while at the present time similar conditions are causing a high rate in Western Australia. That temperature and climate have an effect on the death-rates from these diseases is proved from the fact that they are much

more prevalent and more fatal in summer than in any other season of the year, and that in Tasmania and New Zealand, where the climate is mild and genial, the rates are much lower than in Queensland and Western Australia, where the climate is very warm, and in some parts tropical, while the other colonies, whose climates are fairly temperate, show rates between the two extremes.

The decline in the number of deaths from diarrhœa may be in part due to the fact that of late years more skilful diagnosis in some cases makes possible the ascription of death to ailments of which diarrhœa may be only a symptom.

Typhoid (Enteric) Fever.

Seeing that typhoid is entirely a filth disease, the poison of which is propagated by sewage, and that perhaps no disease is more affected by sanitary improvements in the way of drainage, it is a matter of very great regret that the annual mortality from it should be so heavy. In 1898 typhoid was responsible for 1,735 deaths in Australasia, or at the rate of 3·96 per 10,000 living, as against the English rate of 1·82, which was the highest recorded there for five years. The table below shows the number of deaths from this disease in each colony, the death-rates, and the proportion borne to the total deaths, arranged in five-year periods since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
			Number of Deaths.			
New South Wales	.....	1,722	2,132	2,307	1,533	1,223
Victoria	1,799	2,174	2,364	3,209	1,571	1,139
Queensland	424	525	1,303	990	513	462
South Australia	372	446	632	566	369	344
Western Australia	.....	....	.....	59	500	1,103
Tasmania	156	184	213	401	230	175
New Zealand	*632	739	626	674	561	350
Australasia	.....	5,790	7,270	8,206	5,277	4,796
			Death-rate per 10,000 living.			
New South Wales	.....	5·20	5·06	4·46	2·55	3·14
Victoria	4·71	5·29	5·18	6·09	2·70	3·26
Queensland	5·91	5·14	9·67	5·48	2·48	3·38
South Australia	3·80	3·69	4·30	3·67	2·20	3·23
Western Australia	.....	.....	.....	2·83	15·02	25·38
Tasmania	3·03	3·38	3·48	5·85	2·99	3·45
New Zealand	*5·10	3·46	2·37	2·24	1·70	1·62
Australasia	.....	4·69	4·90	4·64	2·64	3·71

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales	.....	3·23	3·23	3·23	2·00	2·61
Victoria	3·01	3·46	3·54	3·79	1·91	2·30
Queensland	3·29	3·04	5·06	3·53	1·93	2·67
South Australia	2·40	2·47	2·92	2·92	1·81	2·71
Western Australia	.....	.....	.....	1·77	9·21	14·95
Tasmania	1·94	2·05	2·18	3·86	2·27	2·82
New Zealand	*3·78	2·92	2·15	2·27	1·67	1·73
Australasia	.....	3·12	3·32	3·32	2·07	2·99

* Four years, 1872–1875.

It will be observed that the rates over the whole period covered by the table show a decline, and that although there has been an increase during the last three years, there was a marked decrease during the preceding five years. Notwithstanding the epidemic nature of the disease, the rates do not fluctuate greatly. In 1889 there was an epidemic of enteric fever in New South Wales, Victoria, Queensland, and Tasmania, which helped to keep up the rates for 1886–90. During the two periods of the last eight years the rates in all the colonies, excluding Western Australia, were fairly uniform, only ranging in 1891–95 from 1·70 in New Zealand to 2·99 in Tasmania, and in 1896–98 from 1·62 in New Zealand to 3·45 in Tasmania. Since the epidemics of 1887 and 1889 in Tasmania, typhoid seems to have been more prevalent there than in the other provinces, although Victoria and Queensland are not far behind. The case of Western Australia, where typhoid is the cause of 15 per cent. of all deaths, deserves particular notice, the death-rate being as high as 25·38 per 10,000 living, having risen from 2·83 in the short space of ten years. In 1895 Western Australia had its maximum typhoid death-rate with 35·46 per 10,000, but with improved sanitation the rate has since year by year declined. Prior to 1894, the year in which the gold-rush may be said to have commenced, the disease was little known in the western colony. In England and Wales since the measures which have been taken to improve the drainage and water supply the rate has steadily dropped from 3·74 in 1871–75 to 1·68 in 1896–98.

PARASITIC DISEASES.

The deaths from parasitic diseases in Australasia during 1898 numbered 209, and comprised 0·36 per cent. of the total causes of death, equal to a death-rate of 0·48 per 10,000 living. The chief

disease of this group is hydatids, which was responsible for 147 deaths, or 0·34 per 10,000 of the population, and was most common in Victoria and New South Wales, where the rates were 0·46 and 0·43 respectively.

Dietetic Diseases.

Dietetic diseases in 1898 carried off 670 persons, or at the rate of 1·53 per 10,000 living, and were the cause of 1·14 per cent. of the total deaths, the chief contributing causes being privation and intemperance.

Constitutional Diseases.

The next class of diseases is the constitutional, which caused in 1898 9,004 deaths, or 15·37 per cent. of the total, giving an average of 20·54 per 10,000 living. Of these diseases, phthisis and cancer stand out most prominently, and deserve special consideration.

Phthisis.

Phthisis claims more victims in the colonies than any other disease, but notwithstanding this fact the death-rates are lower than in the other countries of the world. This is all the more pleasing when it is considered that the Australian climate is undoubtedly favourable to people suffering from pulmonary complaints, and that thereby many persons afflicted with the disease, or predisposed to it, are attracted to this country in the hope of obtaining relief. It is estimated that of the total persons who die of phthisis, 7 per cent. do so after less than five years' residence in the colonies. In 1898 phthisis caused 4,181 deaths in Australasia, equal to a rate of 9·54 per 10,000 living. The following table shows the number of deaths from this disease in each colony, the death-rates, and the proportion of total deaths since 1870, arranged in five-year periods :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
	Number of Deaths.					
New South Wales	2,532	3,363	4,805	5,127	5,198	3,079
Victoria	4,594	5,397	6,428	7,662	7,751	4,323
Queensland	784	1,330	2,332	2,412	2,266	1,283
South Australia	872	1,244	1,558	1,640	1,667	933
Western Australia	*89	120	135	194	250	283
Tasmania	522	536	658	671	658	373
New Zealand...	*1,080	1,805	2,418	2,529	2,693	1,716
Australasia	.....	13,795	18,334	20,235	20,483	11,990

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
DEATH-RATE per 10,000 living.						
New South Wales	9·28	10·16	11·41	9·90	8·64	7·90
Victoria	12·02	13·13	14·10	14·55	13·32	12·37
Queensland	10·93	13·01	17·31	13·35	10·93	9·39
South Australia	8·92	10·28	10·60	10·63	9·95	8·75
Western Australia	*8·58	8·58	8·57	9·30	7·51	6·51
Tasmania	10·13	9·85	10·76	9·79	8·54	7·36
New Zealand	*8·72	8·46	9·15	8·39	8·15	7·93
Australasia	10·09	11·06	12·22	11·43	10·25	9·27
PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales	6·19	6·31	7·27	7·17	6·77	6·58
Victoria	7·69	8·59	9·62	9·05	9·45	8·73
Queensland	6·09	7·69	9·06	8·60	8·52	7·41
South Australia	5·63	6·90	7·21	8·47	8·19	7·35
Western Australia	*5·13	5·99	4·98	5·82	4·60	3·84
Tasmania	6·48	5·96	6·72	6·46	6·50	6·01
New Zealand	*6·46	7·14	8·32	8·50	8·03	8·47
Australasia	6·61	7·35	8·26	8·19	8·04	7·49

* Four years, 1872-75.

For the first half of the period covered by the table, phthisis seems to have been on the increase; but since 1885 it has steadily decreased, and the mortality rate is now lower than that of England—where the rate is over 13 per 10,000 living—or of any European country. This decline is very satisfactory, inasmuch as it shows the result of the more skilful treatment consequent on the careful study which has been made of the disease during recent years, and proves the usefulness of the preventive measures which have been taken against it. Phthisis has always been most prevalent in Victoria, but the death-rate in Queensland is rather high, owing to the peculiar liability of natives of the Pacific Islands to succumb to attacks of the disease. The returns show that the deaths from consumption of these persons in Queensland are out of all proportion to their number in the population. Western Australia has, on the whole, had the lowest rate, and at the present time the rate is little more than half that of Victoria. New South Wales, Tasmania, and New Zealand also show satisfactory rates.

Cancer.

Next to phthisis, cancer is the most deadly of the constitutional diseases, and in 1898 was the cause of the death of 2,616 persons, or at the rate of 5·97 per 10,000 living. In the table below are shown the number of deaths in each colony from cancer, the death-rates, and the proportion of deaths to total deaths since 1870:—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
Number of Deaths.						
New South Wales	772	934	1,146	1,876	2,587	2,021
Victoria	1,245	1,712	2,065	2,799	3,621	2,427
Queensland	125	225	336	508	731	599
South Australia	199	352	475	592	803	555
Western Australia	*16	23	52	85	102	136
Tasmania	249	255	308	341	371	275
New Zealand	*262	526	806	1,270	1,725	1,255
Australasia	.....	4,027	5,188	7,471	9,940	7,268
Death-rate per 10,000 living.						
New South Wales	2·83	2·82	2·72	3·62	4·30	5·18
Victoria	3·26	4·16	4·53	5·32	6·22	6·94
Queensland	1·74	2·20	2·49	2·81	5·53	4·38
South Australia	2·04	2·91	3·23	3·84	4·79	5·21
Western Australia	*1·54	1·64	3·30	4·07	3·06	3·13
Tasmania	4·83	4·69	5·04	4·98	4·82	5·43
New Zealand	*2·11	2·46	3·95	4·22	5·22	5·80
Australasia	2·76	3·23	3·46	4·22	4·97	5·62
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	1·89	1·75	1·73	2·63	3·37	4·32
Victoria	2·08	2·73	3·09	3·31	4·41	4·90
Queensland	0·97	1·30	1·31	1·81	2·75	3·46
South Australia	1·29	1·95	2·20	3·06	3·94	4·37
Western Australia	*0·92	1·15	1·92	2·55	1·88	1·84
Tasmania	3·09	2·84	3·15	3·28	3·66	4·43
New Zealand	*1·57	2·08	2·77	4·27	5·15	6·19
Australasia	1·81	2·15	2·34	3·03	3·90	4·54

* Four years, 1872–75.

It will be observed that with some slight irregularity the death-rate from cancer has steadily risen in all the colonies over the whole period covered by the table, the largest increases being shown by Victoria and New Zealand. For the first half of the period Tasmania had the highest rate, but so rapid has been the progress of the disease in Victoria and New Zealand that the rates in both of these colonies are now higher than that of Tasmania. With the exception of the period from 1881 to 1890, Western Australia has always shown the lowest rates.

Although part of the increase may arise from the fact that more skilful diagnosis in recent years enables cancer to be ascribed as the cause of death in obscure malignant diseases more often than was formerly the case, yet after making due allowance on this score, the conclusion must inevitably be arrived at that the spread of the disease in these colonies is a dread reality.

Developmental Diseases.

The deaths from developmental diseases in 1898 were 5,245 (8·95 per cent. of the total), or 11·96 per 10,000 persons living, and of these deaths, 2,910, or 6·64 per 10,000 living, were ascribed to the vague cause, old age. Premature birth was set down as the cause of death of 1,465 infants, a mortality equal to 12·44 per thousand children born alive, or 1 in every 80.

Local Diseases.

Local diseases in 1898 were the cause of 46·53 per cent. of the total deaths, and averaged 62·18 per 10,000 living. This group comprises diseases of the various systems and special organs of the body, the principal being diseases of the nervous system and of the circulatory system, which are further considered below. Under this heading also are classified diseases of the respiratory system, which caused 7,122 deaths, equal to 16·24 per 10,000; of the digestive system, responsible for 6,655 deaths, or 15·18 per 10,000; and of the urinary system, the deaths from which numbered 2,035, equal to a rate of 4·66 per 10,000.

Diseases of the Nervous System.

It has been asserted that coincident with the advance of civilisation there has been an increase in diseases of the nerves and brain, but from the figures in the following table showing for each colony the number of deaths, the death-rates, and the proportion of deaths to total deaths since 1870, it will be seen that such has not been the case. Morever, it has been ascertained that deaths from apoplexy and convulsions in proportion to population are now less frequent than formerly. In 1898 the total deaths from diseases of the nerves and brain numbered 5,345, or at the rate of 12·19 per 10,000 living.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales	5,881	6,844	8,522	8,432	8,256	4,797
Victoria	6,503	7,029	7,414	8,585	7,852	4,481
Queensland	1,656	2,190	2,684	3,005	2,778	1,706
South Australia	2,068	2,249	2,645	2,177	2,127	1,264
Western Australia	*230	309	296	379	510	487
Tasmania	1,133	1,238	1,577	1,388	1,210	685
New Zealand	*1,850	2,614	3,244	3,320	3,528	2,274
Australasia	.....	22,473	26,382	27,286	26,261	15,694
DEATH-RATE per 10,000 living.						
New South Wales	21·56	20·67	20·23	16·28	13·73	12·30
Victoria	17·02	17·10	16·26	16·30	13·49	12·82
Queensland	23·09	21·42	19·93	16·63	13·40	12·48
South Australia	21·15	18·59	17·99	14·11	12·70	11·86
Western Australia	*22·17	22·09	18·79	18·16	15·32	11·21
Tasmania	21·99	22·75	25·78	20·25	15·70	13·52
New Zealand	*14·93	12·25	12·27	11·02	10·67	10·51
Australasia	18·61	18·02	17·59	15·42	13·14	12·13
PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales	14·38	12·85	12·89	11·80	10·75	10·25
Victoria	10·88	11·19	11·10	10·14	9·57	9·05
Queensland	12·87	12·67	10·43	10·72	10·45	9·85
South Australia	13·36	12·48	12·24	11·24	10·44	9·96
Western Australia	*13·25	15·43	10·93	11·37	9·39	6·60
Tasmania	14·06	13·76	16·11	13·36	11·95	11·04
New Zealand	*11·07	10·35	11·16	11·16	10·52	11·22
Australasia	12·19	11·98	11·89	11·05	10·30	9·80

* Four years 1872-75.

A study of the table shows that the death-rate for diseases of the nervous system in Australasia has decreased by over one-third during the last twenty-five years, representing a gain of 6 persons to the population in every 10,000 living. Amongst the various colonies the rates are now remarkably even, only ranging from 10·51 in New Zealand, which has always had the lowest rate, to 13·52 in Tasmania, which has always had the highest, whereas twenty years ago the range between the same colonies was from 12·25 to 22·75.

Diseases of the Circulatory System.

Diseases of the heart, which now command more attention than previously on account of their more frequent occurrence, and also on account of the better knowledge of the organ which now exists, were responsible in 1898 for 4,940 deaths, or 11·27 per 10,000 living. The following table shows the number of deaths in each colony from these diseases, the death-rates, and the proportion of total deaths since 1870:—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
Number of Deaths.						
New South Wales	2,197	2,755	3,262	4,289	4,826	3,317
Victoria	3,138	3,666	4,453	6,198	7,365	4,745
Queensland	444	586	991	1,406	1,575	1,319
South Australia	649	934	1,180	1,359	1,605	1,159
Western Australia	*102	147	201	239	408	459
Tasmania	499	578	700	799	875	612
New Zealand	*795	1,422	1,762	2,284	2,767	2,178
Australasia	.....	10,088	12,549	16,574	19,421	13,789
Death-rate per 10,000 living.						
New South Wales	8·05	8·32	7·74	8·23	8·02	8·51
Victoria	8·21	8·92	9·77	11·77	12·66	13·58
Queensland	6·19	5·73	7·36	7·78	7·60	9·65
South Australia	6·64	7·72	8·03	8·81	9·58	10·87
Western Australia	*9·83	10·51	12·76	11·45	12·26	10·56
Tasmania	9·69	10·62	11·44	11·66	11·36	12·08
New Zealand	*6·42	6·66	6·67	7·58	8·37	10·06
Australasia	7·53	8·09	8·37	9·36	9·72	10·66
Proportion per cent. of Deaths to Total Deaths.						
New South Wales	5·37	5·17	4·93	6·00	6·28	7·09
Victoria	5·25	5·84	6·67	7·32	8·98	9·58
Queensland	3·45	3·39	3·85	5·01	5·93	7·62
South Australia	4·19	5·18	5·46	7·02	7·88	9·14
Western Australia	*5·88	7·34	7·42	7·17	7·51	6·22
Tasmania	6·19	6·43	7·15	7·69	8·64	9·86
New Zealand	*4·76	5·63	6·06	7·68	8·25	10·74
Australasia	4·94	5·38	5·66	6·71	7·62	8·61

* Four years, 1872-75.

It will be seen that deaths from the diseases of the organs of circulation have steadily and rapidly increased during the last twenty-five years. It is questionable whether the increase shown is not partly due to more skilful diagnosis, as many deaths formerly attributed to old age are now assigned to some more definite cause. The highest death-rates prevail in Victoria and Tasmania, which is, perhaps, explained by the fact that diseases of the heart mainly affect persons of middle and later life, and these two colonies have the largest proportional numbers of old people. New South Wales and Queensland have the lowest rates; while the other three colonies, South Australia, Western Australia, and New Zealand, are all fairly equal.

Deaths in Childbirth.

Included under the heading of local diseases are diseases of parturition, which, together with puerperal fever, a septic disease of the zymotic group, comprise the causes of death of women in childbed. In 1898, deaths from these diseases averaged 1 in every 170 births, which differs slightly from the ratio to confinements, as some births are multiple. The table below gives the number of deaths from these diseases in each colony since 1872, and the deaths per 1,000 births, the usual method of stating the rate :—

State.	1873-77.	1878-82.	1883-87.	1888-92.	1893-97.	1898.
Number of Deaths.						
New South Wales	*448	555	833	824	1,336	256
Victoria	997	899	895	916	943	170
Queensland	189	244	311	368	317	62
South Australia	208	255	241	217	263	60
Western Australia	32	27	31	25	58	26
Tasmania	123	74	88	88	106	29
New Zealand	367	435	582	464	459	91
Australasia	.....	2,489	2,981	2,902	3,482	694
Death-rate per 1,000 Births.						
New South Wales	*6·43	3·99	4·79	4·24	6·96	7·07
Victoria	7·42	6·74	5·96	4·96	5·61	5·63
Queensland	5·75	6·07	5·33	5·00	4·43	4·45
South Australia	5·32	5·00	4·22	4·06	5·13	6·71
Western Australia	7·48	5·54	4·86	3·01	4·32	5·23
Tasmania	7·88	3·94	3·85	3·62	4·39	6·33
New Zealand	5·13	4·68	5·99	5·06	4·96	4·80
Australasia	.....	5·18	5·27	4·60	5·68	5·89

* 1875-77.

The rate showed a tendency to decline up till 1893, since when it has risen. The statistics presented above, however, are not as reliable as they might be, for the reason that medical attendants do not take sufficient care when furnishing the certificate required of them by law to state the real cause of death; for instance, it is believed that the word *puerperal* is omitted in many cases, especially of pyæmia and septicæmia where death occurred in childbirth. The New South Wales returns since 1892 have been compiled with great care, and are perhaps nearest to the truth, while the Victorian figures are also fairly reliable.

Deaths from Violence.

Deaths by violence in 1898 numbered 3,878, equal to 6·62 per cent. of the total deaths, or at the rate of 8·85 per 10,000 living. Of these, more than 83 per cent. were the results of accidents or negligence, and nearly 14 per cent. were due to suicide; further information with respect to which will be found in the chapter "Social Condition."

Accidents.

The total number of persons who died in 1898 from accidents was 3,239, or 7·39 per 10,000 living. The following table shows the number of deaths in each colony from this cause, the death-rates, and the proportion of total deaths since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
Number of Deaths.						
New South Wales	2,982	3,569	4,174	4,542	4,520	2,978
Victoria	3,908	3,539	3,662	4,612	4,262	2,392
Queensland	1,134	1,389	1,874	2,639	2,349	1,473
South Australia	610	877	919	1,038	912	689
Western Australia	*106	184	184	277	400	535
Tasmania	492	497	441	551	500	384
New Zealand	*1,259	2,200	2,216	2,369	2,494	1,457
Australasia	.....	12,255	13,470	16,028	15,437	9,908
Death-rate per 10,000 living.						
New South Wales	10·93	10·78	9·91	8·77	7·51	7·64
Victoria	10·23	8·61	8·03	8·76	7·32	6·84
Queensland	15·81	13·59	13·91	14·60	11·33	10·78
South Australia	6·24	7·25	6·25	6·73	5·45	6·46
Western Australia	*10·22	13·16	11·68	13·28	12·02	12·31
Tasmania	9·55	9·13	7·21	8·04	6·49	7·58
New Zealand	*10·16	10·31	8·38	7·86	7·55	6·73
Australasia	10·10	9·83	8·98	9·06	7·72	7·66

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
	PROPORTION per cent. of Deaths to Total Deaths.					
New South Wales	7·29	6·70	6·31	6·36	5·89	6·36
Victoria	6·54	5·63	5·48	5·45	5·19	4·84
Queensland	8·81	8·04	7·28	9·41	8·84	8·51
South Australia	3·94	4·87	4·25	5·36	4·48	5·43
Western Australia	*6·11	9·19	6·79	8·31	7·37	7·25
Tasmania	6·10	5·53	4·50	5·30	4·94	6·19
New Zealand	*7·53	8·71	7·62	7·96	7·44	7·19
Australasia	6·62	6·53	6·07	6·49	6·06	6·19

* Four years, 1872-75.

The death-rates from accidents have fallen considerably, as the table shows, but they are still by no means low, and none of the colonies exhibits so small a rate as that of England and Wales, viz., 5·5 per 10,000 living. Western Australia and Queensland, which have the most scattered populations, show the largest rates, while New South Wales and Tasmania come next, followed by Victoria, New Zealand, and South Australia, where accidents seem always to have been less frequent than in the other colonies. The most common accidents appear to be fractures, contusions, and drowning, the last mentioned causing a large number of deaths in Queensland every year, the high rate during 1886–90 in that colony being due to the great number of people (340) who were drowned in 1890.

MARRIAGES.

The number of marriages and the marriage-rate per thousand of the population for each colony during the year 1899 are shown below :—

State.	Marriages.	Marriage-rate.
New South Wales	9,275	6·89
Victoria	8,140	7·01
Queensland	3,449	7·23
South Australia	2,276	6·19
Western Australia	1,671	9·85
Tasmania	1,147	6·38
New Zealand	5,461	7·28
Australasia	31,419	7·06

During 1899 the marriage-rate increased in all the colonies with the exception of Western Australia, while in every case it was higher than the average for the preceding ten years. Taken in conjunction with the rise in price of exports, this increase in the marriage-rate may be looked upon as a sure sign of returning prosperity to these colonies.

The number of marriages in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the four years 1896–99, was as follows :—

State.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
New South Wales	16,920	18,271	21,210	25,904	35,737	38,671	39,924	35,371
Victoria	22,237	22,902	24,368	25,416	33,589	42,832	37,717	30,839
Queensland	3,689	4,648	6,276	7,466	11,632	15,271	13,526	12,138
South Australia	6,226	6,435	7,472	10,682	12,379	10,334	10,686	8,633
Western Australia	765	828	835	978	1,112	1,495	2,332	6,081
Tasmania	3,340	3,143	3,290	4,087	5,005	4,796	4,524	4,260
New Zealand	7,240	9,955	12,050	16,220	18,102	18,097	20,210	20,323
Australasia	60,417	66,182	75,501	90,753	117,556	131,496	128,919	117,645

The average marriage-rates for each colony during the same periods are given below. The table shows the ratio of marriages to population ; to ascertain the ratio of persons married it is necessary to double the figures :—

State.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–99.
New South Wales	9·04	8·04	7·77	7·82	8·46	7·47	6·64	6·74
Victoria	7·81	6·86	6·38	6·03	7·37	8·13	6·48	6·62
Queensland	13·51	9·02	8·75	7·30	8·64	8·45	6·53	6·58
South Australia	9·02	7·45	7·64	8·83	8·42	6·70	6·29	5·96
Western Australia	8·92	7·53	6·48	6·99	7·06	7·16	7·01	10·07
Tasmania	7·30	6·35	6·39	7·51	8·18	7·00	5·87	6·21
New Zealand	10·39	9·00	8·05	7·60	6·85	6·00	6·11	6·97
Australasia	8·73	7·61	7·27	7·28	7·84	7·43	6·44	6·76

During the five years ended 1895 the marriage-rate fell considerably in Australasia. With the exception of New Zealand it was lower in every colony than during the preceding quinquennial period, and lower everywhere than during the five years 1881–85, while during the last four years the rate rose again in every colony except South Australia. This is another proof of the truth of the oft-repeated statement that commercial depression always exerts an adverse influence on the marriage-rate. The abnormal rise in the case of Western Australia is what might be expected from the large number of men whom the industrial activity in that colony has placed in a position to take upon their shoulders the responsibility of a household.

As marriage is the great institution by which the birth-rate is controlled, and through which the population is regulated, it will not be out of place to consider the fertility of marriages in the colonies. The two chief elements influencing this are the age at marriage of the parents, especially of the mother, and the duration of married life. The mean age at marriage of bridegrooms in Australasia is a little over 29 years, and of brides about 24·5 years, and it is known that these ages have been increasing for some years past. As regards the

duration of married life, it is not possible to speak with certainty; all that is known is that the length of lifetime of married persons surpasses that of the unmarried—both male and female. The fertility of marriages is reckoned by the number of children to each marriage; and as the difference between the mean age of mothers and the mean age of brides in Australia is between 5 and 6 years, the average number of children to a marriage has been computed for the following table by dividing the number of legitimate births during each quinquennium by the number of marriages during the preceding five years:—

NUMBER of Children to a Marriage.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales	5·59	5·76	5·87	5·01	4·80	4·28
Victoria	5·77	5·20	5·26	4·88	3·99	3·86
Queensland	6·12	5·75	6·29	5·76	4·54	4·94
South Australia	5·53	6·06	5·19	4·19	4·97	4·22
Western Australia	4·72	5·32	5·35	6·62	.....	.....
Tasmania	4·68	5·01	5·01	4·56	4·93	4·75
New Zealand.....	5·94	7·15	5·77	5·03	4·86	4·46
Australasia	5·68	5·79	5·59	4·96	4·53	4·26

Western Australia has been excluded from the table during the latter years, as the sudden influx of population into that colony since the discovery of the gold-fields has unduly increased the number of births to be divided by the number of marriages of the preceding five years, and would have the effect of making the marriages of that colony appear more fertile than they really are. Of course, it is admitted that the above means of determining the fecundity of marriages is only tentative; still the results cannot be very far from the truth, as is proved by the case of New South Wales, where accurate computations have shown the number of children to be expected from the present marriages in that colony to be only 4·04. The table shows that, on the whole, the fertility of marriages has been steadily declining since 1885, which bears out what has been before remarked in dealing with this question.

Particulars relative to divorce in the Australasian colonies will be found in the chapter headed "Social Condition."

NATIVE RACES.

At the census of 1891 only 38,879 aborigines were enumerated, of whom 8,280 were in New South Wales, 565 in Victoria, 23,789 in South Australia, and 6,245 in Western Australia. The figures relating to New South Wales and Victoria included all aborigines living in those provinces, but the returns from the other colonies were very imperfect.

The aborigines of Tasmania are extinct, but the Tasmanian census of 1891 enumerated 139 half-castes, who were included in the general population. It has been asserted that there are some 70,000 aborigines in Queensland, but this is a very crude estimate, and may be far wide of the truth. In the case of South Australia, a large number of the aborigines in the Northern Territory are entirely outside the bounds of settlement, and it seems probable that they are as numerous in that colony as in Queensland. The census of Western Australia included only those aboriginals in the employment of the colonists, and as large portions of this, the greatest in area of all the Australasian colonies, are as yet unexplored, it may be presumed that the number of aborigines enumerated was very far short of the total in the colony. Altogether, the aboriginal population of the continent may be set down at something like 200,000. An approximate census by the police of the aboriginal population, as at the end of 1898, gave the number of blacks and half-castes in New South Wales as 6,891, and a similar enumeration in Western Australia of those in contact with whites as 12,183; while the number in Victoria at the same date was estimated at 449.

The original inhabitants of New Zealand, or Maoris, as they are called, are quite a different race from the aborigines of Australia. They are gifted with a considerable amount of intelligence, are quick at imitation, and brave even to rashness. According to the census of 1881 they numbered 44,097; but, like the Australian aborigines, they appear to be decreasing in number, for the census of 1886 enumerated only 41,432; that of 1891, 41,993; and that of 1896, 39,854, namely, 21,673 males and 18,181 females. In the 1896 figures are included 3,503 half-castes living as members of Maori tribes (1,944 males and 1,559 females), and 20 Morioris at Chatham Islands (11 males and 9 females). Half-castes to the number of 2,259 (1,123 males and 1,136 females), living with Europeans at the time of the census, were enumerated as Europeans. It is said that when the colonists first landed in New Zealand the number of Maoris was fully 120,000, but this, like all other estimates of aboriginal population, is founded on very imperfect information.

Alien Races.

At the census of 1891 the Chinese and half-caste Chinese in the whole group of colonies numbered 42,521, distributed as follows :—

New South Wales	14,156
Victoria	9,377
Queensland	8,574
South Australia	3,997
Western Australia	917
Tasmania	1,056
New Zealand	4,444
Australasia	42,521

Since 1880 it has been deemed expedient by the Governments of the colonies to enact prohibitive laws against the immigration of Chinese, and their migration from one colony to another. For several years a poll-tax of £10 was imposed, but now, in New South Wales, in accordance with the most recent legislation on the subject, masters of vessels are forbidden under a heavy penalty to bring more than one Chinese to every 300 tons, and a poll-tax of £100 is charged on landing. In Victoria, Queensland, and South Australia no poll-tax is imposed, but masters of vessels may bring only one Chinese to every 500 tons burden. The Western Australian Act was similar to that in the three last-named colonies until recently, but has now been superseded by the Coloured Immigrants Restriction Act. Tasmania allows one Chinese passenger to every 100 tons, and imposes a poll-tax of £10. In New Zealand an Act similar to the Tasmanian Act was in force until 1896, when the poll-tax was raised to £100, and the number of passengers restricted to one for every 200 tons burden. These stringent regulations have had the effect of greatly restricting the influx of this undesirable class of immigrants ; but it is to be feared that the census of 1901 will disclose the fact that the Restriction Acts have not been so effectual in shutting out the Chinese from Australasia as the shipping returns of the colonies would lead one to suppose.

The only other alien race which the census of 1891 disclosed to be present in large numbers in Australasia was the Polynesians in Queensland, where they numbered 9,428.

According to a census taken in Queensland on 31st October, 1898, there were in that colony the following numbers of coloured aliens :—

Chinese	8,051
Pacific Islanders	8,617
Japanese	3,247
Javanese, and other Asiatic races	1,438
Total	21,353

Since 1891 there has been an influx of Hindoos and other eastern races sufficiently large to cause a feeling of uneasiness amongst the colonists, and in some of the colonies Parliament dealt with the evil by passing legislation which, in the main, meted out to these immigrants the treatment accorded to the Chinese. But a very large proportion of the Asiatics whose entrance into the colonies it was desired to stop were British subjects, and the Imperial Government refused to sanction any measure directly prohibiting in plain terms the movement of British subjects from one part of the empire to another. Eventually, the difficulty was overcome by the application of an educational test to the coloured races seeking admission to the colonies, whereby they are required to write out in some European language an application to the Colonial Secretary. This provision, which is said to have been effectual in Natal, is taken from an Act in operation in that colony.

An Act applying the educational test has been in force in Western Australia since the beginning of 1898; similar Acts have now been passed and are in operation in the other colonies.

Naturalisation.

The Acts relating to the naturalisation of aliens do not differ very materially in any of the colonies. In New South Wales, Victoria, South Australia, Western Australia, and New Zealand aliens may hold and acquire both real and personal property, but may not qualify for any office nor have any rights or privileges except such as are expressly conferred upon them, while in Queensland and Tasmania they may hold personal property, but lands for twenty-one years only.

In every colony except New South Wales, South Australia, and Queensland every alien of good repute residing within the colony who desires to become naturalised may present a memorial signed by himself, and verified upon oath, stating his name, age, birthplace, residence, occupation, and length of residence in the colony, and his desire to settle therein, together with all other grounds on which he seeks to obtain the rights of naturalisation, and apply for a certificate, which the Governor may grant if he thinks fit. After the letters of naturalisation have been received and the oath of allegiance taken, the holder becomes entitled to all the privileges which are conferred upon subjects of Her Majesty. In New South Wales it is insisted that the applicant must have resided for at least five years before he can be naturalised, and he must present, together with his own statutory declaration stating his name, age, birthplace, occupation and residence, a like declaration of some other person as to his term of residence in New South Wales; in South Australia six months' residence is compulsory, while in Queensland an Asiatic or African alien must be married and have his wife living in the colony, and must have resided in the colony for three years, when he must present a similar memorial to that cited above. If the application is granted, he becomes entitled to all privileges except that of becoming a member of the Legislature.

In all the colonies any alien woman marrying a natural-born subject becomes and is deemed to be naturalised, and any person resident in the colony who has obtained a certificate of naturalisation in any British possession, and who presents such certificate, and further satisfies the Governor that he is the person named in the certificate, and that such was obtained without fraud, may be granted a certificate of naturalisation without any further residence in the colony being required of him.

The rights of naturalisation are refused the Chinese in some of the colonies, viz., New South Wales, Victoria, Queensland, and Western Australia. Germans have availed themselves most largely of the privileges, having taken out about one-half of the certificates granted.

The number of persons naturalised in Australasia during 1898 was 1,260; more than three-quarters took out papers of naturalisation in

the colonies of New South Wales, Victoria, and Queensland. The figures for the other four colonies are small. The following are the returns for each colony:—

State	Germans and other German-speaking nations.	Scandinavians.	Chinese.	Others.	Total.
New South Wales ...	104	38	.....	135	277
Victoria	144	61	.....	129	334
Queensland	222	21	2	97	342
South Australia	49	11	.....	34	94
Western Australia ...	9	10	.....	26	45
Tasmania	4	2	45	4	55
New Zealand.....	31	22	4	56	113
Australasia	563	165	51	481	1,260

Centralisation of Population.

The progress of the chief cities of Australasia has been no less remarkable than that of the colonies themselves, and has no parallel among the cities of the old world. Even in America the rise of the great cities has been accompanied by a corresponding increase in the rural population, but in these colonies, perhaps for the first time in history, was presented the spectacle of magnificent cities growing with marvellous rapidity, and embracing within their limits one-third of the population of the states of which they are the seat of government. The abnormal aggregation of the population into their capital cities is a most unfortunate element in the progress of the colonies, and one which until recently seemed to become every year more marked. Latterly this growth appears to have ceased, and the proportion of population in the capital cities is now less than in 1891.

One satisfactory feature in connection with the growth of population in the chief cities of Australia is that such increase has not taken place through absorption of the rural population. As in all new countries the tendency has been for immigrants to settle in or near the principal towns which mostly lie near the seaboard, and owing to the fact that these colonies possess no good navigable waterways leading from the interior, aggregation of population in the cities tends to be still further accentuated.

The increase in the population of the chief cities of Australasia and the estimated numbers of their inhabitants at the various census periods, and on 31st December, 1899, are shown in the following table, which illustrates the remarkable progress referred to :—

City.	1841.	1851.	1861.	1871.	1881.	1891.	1899.
Sydney	29,973	53,924	95,789	137,776	224,939	383,283	438,300
Melbourne.....	4,479	23,143	139,916	206,780	282,947	490,896	477,790
Brisbane.....	*829	2,543	6,051	15,029	31,109	93,657	110,951
Adelaide.....	†8,480	‡14,577	18,303	42,744	103,864	133,252	149,672
Perth.....	.....	.....	.....	5,244	5,822	8,447	34,610
Hobart	.....	.. ..	19,449	19,092	21,118	33,450	41,585
Wellington	.....	.....	.....	7,908	20,563	33,224	47,862

* In 1846. † In 1840. ‡ In 1850.

The aggregation of population is most marked in the cases of Melbourne and Adelaide, while Sydney is also conspicuous. The other cities are not so remarkable, the proportion of the people resident in Wellington especially being very small. The proportion of population in each capital compared with that of the whole colony is shown below for the years 1871, 1881, 1891, and 1899 :—

City.	1871.	1881.	1891.	1899.
	per cent.	per cent.	per cent.	per cent.
Sydney	27·34	29·93	33·86	32·31
Melbourne	28·27	32·81	43·05	41·07
Brisbane.....	12·51	14·57	23·79	23·00
Adelaide..... ...	23·03	37·11	41·59	40·38
Perth	20·68	19·60	16·97	20·24
Hobart	18·76	18·25	22·81	22·81
Wellington.....	3·08	4·20	5·30	6·33

Although Wellington is the capital of New Zealand it is exceeded in population by Auckland, and by Dunedin ; while Christchurch is very little less. Still, even in the largest of these cities—Auckland—the population is not more than 8·18 per cent., and in the four together is only 25·84 per cent. of that of the whole colony.

The following is a list of the cities and most important towns of Australasia, with their estimated population on 31st December, 1899; in all cases the suburbs are included. In Queensland, the populations quoted are those of the municipalities, except in the case of Brisbane :—

City or Town.	Population.	City or Town.	Population.
New South Wales—		South Australia—	
Sydney	438,300	Adelaide	131,222
Newcastle	55,240	Port Adelaide	18,450
Broken Hill	23,900	*Port Pirie	8,000
Parramatta	12,500	*Mount Gambier	3,069
Maitland	10,850		
Goulburn	10,720	Western Australia—	
Bathurst	9,450	Perth	34,610
Grafton	6,150	Fremantle	16,013
Orange	6,060	Boulder (and surrounding mines)	14,952
Tamworth	5,740	Kalgoorlie	9,793
Albury	5,500	Coolgardie	5,000
		Albany	3,250
Victoria—			
Melbourne	477,790		
Ballarat	46,410	Tasmania—	
Bendigo	43,112	Hobart	41,585
Geelong	23,440	Launceston	26,105
Warrnambool	6,600	Macquarie Harbour	25,000
Castlemaine	7,990	Beaconsfield	2,860
Stawell	5,400		
Maryborough	5,156	New Zealand—	
		Auckland	52,513
Queensland—		Dunedin	49,791
Brisbane	110,951	Wellington	47,862
Rockhampton	19,180	Christchurch	45,340
Townsville	12,165	Napier	9,486
Toowoomba	12,500	Nelson	7,120
Gympie	12,000	Wanganui	6,842
Maryborough	10,000	Palmerston North	6,263
Ipswich	7,750	Invercargill	5,681
Mount Morgan	6,400	Oamaru	5,411
Bundaberg	5,000	Thames	5,000
Charters Towers	5,000		

* Exclusive of suburbs.

Macquarie Harbour, in Tasmania, embraces the main great mining centres of Queenstown, Zeehan, and Strahan (the port).

The above statement shows clearly where the people have settled, for excluding the capitals, there are only six cities in the whole of Australasia with a population of over 40,000, viz., Newcastle, 55,240; Auckland, 52,513; Dunedin, 49,791; Ballarat, 46,410; Christchurch, 45,340; Bendigo, 43,112; and of these six, three are in New Zealand.

Birthplaces.

One of the subjects of inquiry at the census of 1891, as at previous enumerations, was the birthplaces of the population. The result of the tabulation shows that while there are differences in the component parts of the population in the several colonies, these differences are slight, and the great majority of the people—to the extent, indeed, of fully 95 per cent.—are of British origin. Probably the population of Australasia is more homogeneous than that of most European countries; for even in Queensland, where people of foreign descent are proportionately more numerous than in any of the other colonies, they do not amount to more than 10 per cent. of the total population.

The great majority of the Australasian-born population were natives of the particular colony in which they were enumerated. The percentage of the people born in the colony in which they were resident at the time of the census, of those born in the other six Australasian colonies, and of the total Australasian-born population to the total population of each colony, are shown below :—

State.	Percentage to Total Population of—		
	Natives of Colony of Enumeration.	Natives of other Colonies.	Australasian-born Population.
New South Wales	64·51	7·47	71·98
Victoria	62·56	6·75	69·31
Queensland	44·95	7·14	52·09
South Australia	67·95	3·45	71·40
Western Australia	55·89	6·53	62·42
Tasmania	73·57	4·97	78·54
New Zealand	58·52	2·54	61·06
Australasia	61·44	5·96	67·40

These figures show that proportionately the largest Australasian-born population is to be found in Tasmania, where more than 73 out of every 100 of the inhabitants were born in the colony, and over 78 per cent. were Australasians. In Queensland, on the contrary, very nearly half the population were natives of countries outside Australasia, and only 45 per cent. were Queenslanders by birth. The low proportion of native-born in the colony in question is no doubt accounted for by the comparatively recent settlement of much of its territory, and the encouragement given to immigrants from the United Kingdom and the Continent of Europe. It will be noticed that New South Wales has proved the most attractive of all the provinces to those born in other parts of Australasia, while New Zealand, from its isolated position and greater distance, has drawn to itself the smallest proportion of Australasian natives.

Next to the Australasian-born population, natives of the United Kingdom were by far the most numerous class in each colony. The following table shows the percentages of natives of England and Wales, Scotland, and Ireland to the total population of each colony :—

State.	Natives of—			
	England and Wales.	Scotland.	Ireland.	United Kingdom.
New South Wales.....	13·71	3·28	6·68	23·67
Victoria	14·29	4·45	7·48	26·22
Queensland.....	19·60	5·69	10·93	36·22
South Australia.....	15·24	2·77	4·48	22·49
Western Australia ...	19·71	2·43	7·03	29·17
Tasmania	11·89	2·62	3·88	18·39
New Zealand	19·04	8·28	7·60	34·92
Australasia	15·51	4·62	7·23	27·36

It was to be expected that the percentage of natives of the United Kingdom would be highest in those colonies which had introduced a large number of assisted immigrants during the last twenty years, namely, in Queensland, New Zealand, and Western Australia, in which colonies the percentage of the native-born population was comparatively low. If the composition of the population of the United Kingdom be taken into consideration, it will be seen that Scotch and Irish colonists are proportionately much more numerous than those of English birth. The distribution of natives of the three kingdoms is very unequal in the different colonies. While natives of England are proportionately more numerous than natives of Scotland and Ireland in South Australia, Western Australia, and Tasmania ; Scotsmen are most numerous in New Zealand, and Irishmen in Queensland.

Of foreign countries, the natives of Germany were the most numerous ; then follow natives of China, Sweden and Norway, the United States, Denmark, France, Italy, Russia, Switzerland, Austria-Hungary, the Netherlands, Portugal, Spain, and Belgium, while Polynesians are numerous in Queensland. The percentages to the total population of each colony of natives of Germany, of the Scandinavian Kingdoms (Sweden and Norway and Denmark), and of the total foreign-born population, are shown in the subjoined table :—

State.	Percentage of—		
	Germans.	Scandinavians.	Total Foreign-born Population.
New South Wales	0·85	0·43	3·38
Victoria	0·95	0·40	2·98
Queensland	3·79	1·28	8·02
South Australia	2·67	0·45	4·88
Western Australia.....	0·58	0·49	3·91
Tasmania.....	0·63	0·23	1·82
New Zealand	0·74	0·76	2·97
Australasia	1·31	0·56	3·74

It will be seen that both Germans and Scandinavians are proportionately most numerous in Queensland, where together they amount to more than 5 per cent. of the population. Germans are also very numerous in South Australia, and Scandinavians in New Zealand.

Conjugal Condition.

At the Hobart Census Conference, held in 1890, it was decided to tabulate the conjugal condition of the people under the heads of "Never married," "Married," "Widowed," and "Divorced"; but this decision was not adhered to by South Australia and New Zealand, where the divorced were probably included under the heading of unmarried. For the sake of comparison a similar classification has therefore been made in the tabulation of the other colonies. The people who returned themselves as "divorced" on the census schedules of the various colonies were very few in number, and it is reasonable to assume that these numbers were wide of the truth, no doubt owing to the reluctance on the part of many people whose marriage bonds had been severed to return themselves as "divorced" in the census schedules.

The following table shows for each colony the proportion of unmarried, married, and widowed males to total males; of unmarried, married, and widowed females to total females; and of unmarried, married, and widowed persons to total population:—

Percentage of—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
MALES—								
Unmarried	69·81	68·31	72·08	68·38	72·63	67·86	70·39	69·57
Married	27·41	28·58	25·90	29·34	24·38	28·99	27·26	27·74
Widowed	2·78	3·11	2·02	2·28	2·99	3·15	2·35	2·69
FEMALES—								
Unmarried	62·89	61·86	62·16	63·07	63·61	63·31	64·93	62·88
Married	32·11	32·07	33·90	31·44	31·95	30·98	30·95	31·97
Widowed	5·00	6·07	3·94	5·49	4·44	5·71	4·12	5·15
PERSONS—								
Unmarried	66·64	65·24	67·80	65·84	69·01	65·72	67·83	66·46
Married	29·56	30·24	29 35	30·34	27·42	29·93	28·99	29·70
Widowed	3·80	4·52	2·85	3·82	3·57	4·35	3·18	3·84

From the foregoing figures it will be seen that unmarried males are largely in excess of unmarried females in each colony. The excess at the end of 1899, supposing the proportions deduced from the census to

still hold good, and the number of unmarried females to 1,000 unmarried males, would be as shown in the following table :—

State.	Excess of Unmarried Males over Unmarried Females.	Number of Unmarried Females to 1,000 Unmarried Males.
New South Wales	114,200	776
Victoria	36,100	909
Queensland	59,000	694
South Australia	21,900	835
Western Australia	44,200	458
Tasmania	14,000	791
New Zealand	48,300	828
Australasia	337,700	798

The proportion of unmarried females is low in Western Australia, which has attracted much population from the other provinces, and is low also in Queensland, while it is high in Victoria, which has lost largely through emigration, and is near the average in the other colonies which have neither lost nor gained population to any extent. This fact shows that the movement of population during the last few years has been chiefly of young unmarried males attracted from one colony to another by the hope of bettering their condition.

The numbers of married males and females, still supposing the census proportions to hold good, are fairly equal in all the colonies, excepting Western Australia, where married males largely preponderate, and Victoria, where the females are in the majority. As regards the other colonies, the married females are more numerous, except in South Australia and Tasmania.

Amongst the widowed, females largely outnumber males, as was to be expected from the higher death-rate and the proportionately larger number of males re-married. Western Australia, however, shows a slight excess of widowers over widows.

Sickness and Infirmity.

Inquiries were made in the 1891 census schedules respecting the number of persons suffering from sickness and infirmity, but there is reason to believe that, in some of the colonies at least, the way in which the column was filled in was unsatisfactory. The figures for New South Wales, Victoria, and South Australia may be compared throughout, as the classification adopted was practically the same, and to a certain extent this also holds good of the Western Australian and Tasmanian figures. The returns for Queensland are made in a somewhat indefinite way ; and in New Zealand half the number of persons returned as sick

and infirm includes all ages, while the other half only includes the population of 15 years and over. The following table shows the results of the tabulation for each of the colonies :—

Sickness and Infirmity.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand
Sickness—							
Paralysis	851	1,097	*	300	*	*	468
Epilepsy	339	420	*	138	18	37	232
Leprosy	15	3	*	3	*	*	*
Other and undefined	10,117	13,127	*	3,620	487	2,579	†4,404
Total	11,322	14,647	2,969	4,061	505	2,616	5,104
Accidents	1,459	1,668	777	432	62	152	‡679
Deaf and dumb	383	364	154	234	11	54	166
Dumb only	9	*	*	*	*	*	*
Deaf only	1,348	627	*	101	*	*	268
Blindness	741	995	199	247	54	165	274
Lunacy	3,129	3,770	1,104	852	129	383	1,798
Idiocy	286	355	*	84	7	46	128
Crippled	1,775	346	*	186	*	*	979
Lost a limb	635	754	*	251	35	*	*
Lost sight of an eye	1,164	1,157	*	339	79	*	*
Total	22,251	24,683	5,203	6,787	882	3,416	9,396

* Included under more general heading. † Of this number, 4,130 persons refer to the population over 15 years only, while 274 persons refer to the whole population. ‡ Population over 15 years only.

RELIGION.

THE progress of all matters relating to denominational Religion since the early years of Australasian settlement has been steady and remarkable. For the first fifteen years after the foundation of the colony of New South Wales, only a single denomination was recognised by Government or possessed either minister or organisation—the Established Church of England. In those days the whole of Australasia was ecclesiastically within the diocese of the Bishop of Calcutta, of which it formed an Archdeaconry; this continued until 1836, when the bishopric of Australia was constituted, and the Rev. William Grant Broughton, D.D. (formerly Archdeacon), was consecrated the first Bishop. In 1841 the bishopric of New Zealand was established, and in 1842 that of Tasmania. Considerable changes took place in 1847, when the dioceses of Melbourne, Adelaide (including South Australia and Western Australia), and Newcastle (including the northern portion of what is now New South Wales, and the whole of Queensland) were established, and the Bishop of Australia was styled Bishop of Sydney and Metropolitan of Australia and Tasmania. In 1857 the diocese of Perth was formed out of that of Adelaide, and in 1859 the diocese of Brisbane out of that of Newcastle; in 1863 the bishopric of Goulburn was separated from Sydney; in 1867 the bishopric of Grafton and Armidale was formed out of part of the diocese of Newcastle; in 1869 Bathurst was separated from Sydney; in 1875 Victoria was divided into the two dioceses of Melbourne and Ballarat; in 1878 the bishopric of Northern Queensland was established, with Townsville as seat of its Bishop; in 1884 the diocese of Riverina was formed out of parts of the dioceses of Bathurst and Goulburn; and in 1892 parts of the bishoprics of Brisbane and Northern Queensland were formed into the new diocese of Rockhampton. While the six dioceses of New South Wales were united under a provincial constitution, with the Bishop of Sydney as Metropolitan, no such union existed in Victoria or Queensland, and the decision of the Lambeth Conference of 1897, granting the title of Archbishop to Colonial Metropolitans applied, therefore, only to Sydney, whose Bishop thereby became Archbishop of Sydney.

Each colony preserves its autonomy in church matters, but the Archbishop of Sydney is nominal head or Primate within the boundaries of Australia and Tasmania. In 1872 the ties between the churches in the various colonies under the jurisdiction of the Primacy were strengthened by the adoption of one common constitution. A general synod of representatives of each of these colonies meets in Sydney every five years to discuss Church affairs in general. New Zealand is

excluded from this amalgamation, and possesses a Primacy of its own. As already stated, a Bishop of New Zealand was appointed in 1841. After various changes the constitution of the Church in New Zealand was finally settled in 1874, when the whole colony was divided into the six dioceses of Auckland, Waiapu (Napier), Wellington, Nelson, Christchurch, and Dunedin. After the departure of Bishop Selwyn, who has been the only Bishop of New Zealand, the Primacy was transferred to the see of Christchurch, where it remained until 1895. In that year the Bishop of Auckland was elected Primate of New Zealand. The missionary Bishop of Melanesia, whose head-quarters are at Norfolk Island, is under the jurisdiction of the New Zealand primacy. At present, therefore, there are twenty-one bishops in the colonies, including the Bishop of Melanesia, but excluding assistant bishops. The Synodical system of Church Government, by means of a legislative body, consisting of the clergy and representatives of the laity, prevails throughout Australasia, both in the individual colonies and as a group.

In 1803 a grudging recognition was extended to Roman Catholics, one of whose chaplains was for some time placed on the Government establishment; but it was not until 1820 that any regular provision was made for the due representation of the clergy of this body. Until 1834 the Roman Catholics of Australia and Tasmania were under the jurisdiction of the Bishop of Mauritius (the Rev. Dr. Ullathorne being Vicar-General from 1830 to 1834), but in that year Sydney was constituted a see, and the Rev. John Bede Polding, D.D., was consecrated Bishop, with jurisdiction over the whole of the Continent and Tasmania. In 1842 Hobart was established as a separate diocese, and Sydney became an archiepiscopal see. The diocese of Adelaide dates from 1843, that of Perth from 1845, and those of Melbourne, Maitland, Bathurst, and Wellington from 1848. During this year a diocese was established in the Northern Territory of South Australia, which since 1888 has been designated the diocese of Port Victoria and Palmerston. The bishopric of Brisbane was founded in 1859, and that of Goulburn in 1864. In 1867 the Abbey-nullius of New Norcia (Western Australia) was established. The dioceses of Armidale and Auckland date from 1869, and those of Ballarat and Sandhurst from 1874. In 1876 Melbourne became an archdiocese, and Cooktown was formed into a Vicariate-Apostolic. Other changes took place in Queensland in 1882, when the diocese of Rockhampton was founded, and in 1884, when the Vicariate-Apostolic of British New Guinea (with residence at Thursday Island) was established. In 1885 the Archbishop of Sydney was created a cardinal, and placed at the head of the Roman Catholic Church throughout Australasia. Following upon this appointment great alterations took place in the arrangement of dioceses in 1887, when the new dioceses of Grafton, Wilcannia, Sale, Port Augusta, and Christchurch, and the Vicariates-Apostolic of Kimberley and Queensland (the latter with jurisdiction over all the aborigines of the colony) were established, and Adelaide, Brisbane, and Wellington became arch-

dioceses. In 1888 Hobart was also made an archiepiscopal see; and a new see was established in 1898 at Geraldton, in Western Australia. At the present time there are six archbishops, sixteen bishops, three vicars-apostolic, and one abbot-nullius, or in all twenty-six heads of the Church with episcopal jurisdiction, irrespective of the Vicariate-Apostolic of British New Guinea and of several auxiliary and coadjutor-bishops.

Amongst the earliest free colonists who settled in the Hawkesbury district of New South Wales was a small party of Presbyterians, and one of the first places of worship erected in the colony was put up in 1810 at Portland Head by their voluntary exertions. Services were conducted there for years before any ordained minister of the denomination reached New South Wales; indeed, it was not until 1823 that the Rev. Dr. Lang and the Rev. Archibald Macarthur, the first Presbyterian ministers in Australasia, arrived in Sydney and Hobart respectively. The Presbyterian Churches of New South Wales, Victoria (with which the Presbyterian Church of Western Australia is connected), Queensland, South Australia, and Tasmania, are united in a Federal Assembly which meets every year in rotation in the capital cities of the colonies mentioned. New Zealand is not included in this federation, and the Presbyterian Church in that colony is divided into the Presbyterian Church of New Zealand and the Presbyterian Church of Otago and Southland. Besides the churches mentioned, there are several small bodies of Presbyterians unconnected with the larger churches, such as the Presbyterian Church of Eastern Australia in New South Wales, and the Free Church in Victoria. The church in each colony, however, acts independently as regards local ecclesiastical administration, and preserves its autonomy in respect of funds and property.

The first Wesleyan minister came to New South Wales in 1815, but it was not until 1821 that a Wesleyan place of worship was erected in Sydney, and it was even later before the denomination was allowed to share in the Government provision for religion. The first Wesleyan Church in Hobart was established in 1820. From 1815 to 1855 the Wesleyan Church in the colonies was regarded as a mission of the British Wesleyan Church, and from 1855 to 1873 it was affiliated to the British Wesleyan Conference; but in the latter year it was constituted into a separate and independent Conference as the Australasian Wesleyan Methodist Church. At present the Church is divided into five Conferences, viz., New South Wales, Victoria and Tasmania, Queensland, South Australia and Western Australia, and New Zealand. These Conferences meet annually, while a General Conference is held at triennial periods within the boundaries of each annual Conference in the order decided upon. At the General Conference held in Auckland on the 10th November, 1897, it was enacted that Western Australia should be constituted a separate Conference, the division to take place and the first Conference to be held in the year 1900.

A Congregational minister arrived in Sydney as early as 1798; and in Hobart the Congregational Church was established in 1830. At present

there exists a separate Congregational Union in each of the seven colonies. Federal meetings have been held, and a Congregational Union of Australasia has been established. The first meeting of this body was held at Wellington, New Zealand, in 1892. It is intended to hold similar gatherings from time to time in the capital cities of the various colonies.

The Baptist Church in the colonies dates from a much later period, the establishment of the first four Baptist Churches being as follows:—Sydney, 1834; Launceston, 1839; Adelaide, 1840; and Melbourne, 1841. Churches were established in Auckland in 1852, in Brisbane in 1855, and in Perth in 1895. It is stated that in 1898 there were 215 Baptist churches in the colonies, more than half of which were in Victoria and South Australia.

Leaving out of consideration some churches with but a small number of adherents, the Salvation Army may be said to be the youngest of the denominations in Australasia. It commenced operations in South Australia towards the close of the year 1880, and in 1882 officers were despatched from Adelaide to Victoria, New South Wales, and Tasmania, for the purpose of organising corps in those colonies. New Zealand was invaded in 1883, Queensland in 1886, and Western Australia in 1891. The head-quarters of the Army are in Melbourne, and its head in Australasia ranks as a Commissioner. He is directly responsible to General Booth, and controls the officers commanding in each of the seven colonies, who bear the rank of colonel or brigadier. Each colony is divided into districts, which are placed in the charge of superior officers; and each of these districts is subdivided into local corps under subaltern officers, assisted by secretaries, etc. These subaltern officers are responsible to the officers commanding their division, and the latter to the colonel or brigadier in charge of the Army of the whole colony.

In the eyes of the State all religions are equal in Australasia, and State aid to the denominations has now been abolished in all the colonies of the group. South Australia, in 1851, was the first colony to withdraw such aid, after it had been in force only three years; and Queensland, in 1860, shortly after the assembling of the first Parliament, abolished the system inherited from the mother colony, and limited future payments to the clergy then actually in receipt of State aid. New South Wales passed a similar Act in 1862, and the expenditure on this account, which in that year was over £32,000, had fallen in 1898–9 to £5,152. The other colonies of the group, with the exception of Western Australia, subsequently abolished State aid, Victoria being the last of them to withdraw denominational grants, namely, in 1875. In Western Australia the system lasted until 1895, when it was abolished from that year; and, in lieu of the annual grants, two sums of £17,715 each were distributed amongst the religious bodies affected, namely, the Anglicans, Roman Catholics, Wesleyans, and Presbyterians, on the 1st October, 1895, and 1st July, 1896.

The only denominations which ever received State aid were the Church of England, Roman Catholics, Presbyterians, and Wesleyans; other denominations to which it was tendered refusing to accept it. The greater portion of the inhabitants belonged to these four persuasions, and the enormous increase of population during the last forty-five years has not in any considerable degree altered this condition of things, though in some colonies different bodies of Christians have represented a larger proportion of the people than in others. Thus, in New South Wales, Queensland, and Victoria the proportion of Roman Catholics has been, and still is, larger than in the other colonies, while in New Zealand it is much smaller. Presbyterians bear a greater proportion to the population in New Zealand than in any other colony, while Wesleyans and Lutherans are more numerous in South Australia than elsewhere. The adherents of the Church of England predominate numerically in all the colonies, while Congregationalists and Baptists are relatively most powerful in the southern colonies.

The following table shows the proportions held by the principal denominations to the total population of each colony at the enumerations of 1871, 1881, and 1891:—

	State.	Church of England.	Roman Catholics.	Presbyterians.	Wesleyan and other Methodists.	Congregationalists.	Baptists.	All Others.
		℘cent.	℘cent.	℘cent.	℘cent.	℘cent.	℘cent.	℘cent.
1871	New South Wales	45·5	29·3	9·7	7·9	1·8	0·8	5·0
	Victoria	34·4	23·3	15·5	12·3	2·5	2·2	9·8
	Queensland	36·5	26·5	12·8	6·0	2·2	2·4	13·6
	South Australia	27·1	15·2	6·4	18·9	3·5	5·0	23·9
	Western Australia	59·0	28·7	2·1	5·6	3·6	0·2	0·8
	Tasmania	53·5	22·3	9·1	7·2	4·0	0·9	3·0
	New Zealand	41·8	13·9	24·8	8·6	1·5	1·9	7·5
	Australasia	39·1	23·1	13·6	10·5	2·4	2·0	9·3
1881	New South Wales	45·6	27·6	9·6	8·6	1·9	1·0	5·7
	Victoria	34·7	23·6	15·4	12·6	2·3	2·4	9·0
	Queensland	34·6	25·5	10·6	6·7	2·2	2·6	17·8
	South Australia	27·1	15·2	6·4	18·9	3·5	5·0	23·9
	Western Australia	54·7	28·3	3·4	7·0	4·3	...	2·3
	Tasmania	51·7	19·9	7·9	9·5	3·5	1·6	5·9
	New Zealand	41·5	14·1	23·1	9·4	1·4	2·3	8·2
	Australasia	39·1	22·2	13·4	10·9	2·2	2·2	10·0
1891	New South Wales	44·8	25·5	9·7	9·8	2·1	1·2	6·9
	Victoria	35·2	21·8	14·7	13·0	1·9	2·5	10·9
	Queensland	36·2	23·6	11·6	7·8	2·2	2·6	16·0
	South Australia	27·9	14·7	5·7	19·0	3·7	5·5	23·5
	Western Australia	49·7	25·3	4·0	9·2	3·2	0·6	8·0
	Tasmania	49·9	17·6	6·6	11·7	3·1	2·2	8·9
	New Zealand	40·0	13·9	22·6	9·9	1·1	2·4	10·1
	Australasia	39·1	21·1	13·0	11·4	2·1	2·3	11·0

From the foregoing table it will be seen that while there were fluctuations in individual colonies, the relative strength of the principal denominations in the whole of Australasia showed but little alteration during the twenty years from 1871 to 1891. The Church of England at each census embraced 39·1 per cent. of the population, while the Roman Catholic Church receded from 23·1 per cent. in 1871 to 22·2 per cent. in 1881, and still farther to 21·1 per cent. in 1891. The Presbyterian Church also receded from 13·6 per cent. in 1871 to 13·4 per cent. in 1881 and 13·0 in 1891; while the various Methodist bodies, which have been classed together, increased from 10·5 per cent. in 1871 to 10·9 per cent. in 1881 and 11·4 per cent. in 1891. Congregationalists and Baptists taken together were equal at the three enumerations, but the former show a slight decrease during the twenty years, while the latter show a corresponding increase. The column headed "All others" also shows an increase from 9·3 per cent. to 11·0 per cent. during the period. This column contains all the minor denominations, of which none are at all numerous except Lutherans in Queensland and South Australia; those whose denomination could hardly be classed as a religion; and all those who, from conscientious scruples, took advantage of the clauses of the Census Acts by which the filling in of the column "Religious Denomination" was left optional.

The Denominations in 1899.

The estimated numbers of adherents of the various denominations in each state of the Australian Commonwealth at the end of 1899 were as follows:—

Denominations.	New South Wales.	Victoria.	Queensland.	South Australia.	West'n Australia.	Tasmania.	Australian Commonwealth.
Church of England	663,710	413,000	173,660	105,280	78,670	88,420	1,462,740
Roman Catholic	325,600	253,620	103,540	53,750	41,050	29,170	811,730
Presbyterian	131,590	167,530	57,890	20,390	7,700	10,390	395,490
Wesleyan and other Methodists	146,520	154,730	41,490	70,430	17,270	24,430	454,870
Congregational	29,850	19,780	10,610	13,720	5,130	5,290	84,380
Baptist	16,280	30,250	12,540	21,130	1,200	4,740	86,140
Lutheran	9,500	12,800	27,500	25,950	1,370	910	78,030
Salvation Army	16,280	16,290	6,750	5,560	2,560	2,730	50,170
Hebrew	8,140	5,820	960	1,110	850	550	17,430
Mahometans, etc.	13,560	5,820	21,230	4,080	7,700	1,820	54,210
Others	55,620	83,760	21,230	49,300	7,530	13,850	231,290
Total	1,356,650	1,163,400	482,400	370,700	171,030	182,300	3,726,480

while the numbers in New Zealand and in the whole of Australasia were as shown below :—

Denomination.	New Zealand.	Australasia.
Church of England..	295,040	1,757,780
Roman Catholic	105,150	916,880
Presbyterian	167,940	563,430
Wesleyan and other Methodists.	77,920	532,790
Congregational	7,560	91,940
Baptist	18,910	105,050
Lutheran	9,080	87,110
Salvation Army	15,130	65,300
Hebrew	2,270	19,700
Mahometans, etc.	5,300	59,510
Others	52,200	283,490
Total	756,500	4,482,980

DEFENCE.

THE colonists of Australasia have always manifested an objection to the maintenance of a standing army, and shown a disposition to rely mainly upon the patriotism and valour of the citizens for their own defence; but each colony possesses a more or less complete system of fortifications, armed with expensive ordnance which requires a more regular and constant attendance than could well be bestowed by those who devote only a portion of their time to military affairs; hence it has been found advisable to institute in each colony small permanent military forces, consisting for the most part of artillery and submarine miners, whose chief duty it is to man the fortifications and keep the valuable armaments therein in a state of efficiency, so as to be ready for any emergency. At the same time, it is expected that they will prove the nucleus for an effective defence force if ever hostilities should unfortunately occur. When Federation is established, it is provided that the naval and military defences of the colonies shall as soon as possible be tranferred to one central authority under the Commonwealth, and it is hoped that the forces will then be placed on a stronger and more efficient footing.

The greater portion of the Australian forces, consists of volunteers enrolled under a system of partial payment, which affords a defence force without the disadvantages and expense of a standing army. The men receive payment according to the number of parades and night drills they attend, as compensation for wages lost while absent from their employment for the purpose of receiving military instruction. The remuneration varies in the different colonies, the New South Wales scale being 8s. for each whole-day parade, 4s. for a half-day parade, and 2s. for a night drill. There has been a marked tendency in most of the provinces to discourage the services of those who are purely volunteers, as the system was found to work unsatisfactorily, especially in the country districts. In New Zealand alone is the volunteer system the mainstay of defence.

The following table shows the strength of the military forces maintained by each colony as at 30th June, 1900. The total number of men of military ages (from 20 to 40 years) in Australasia is estimated

to be upwards of 800,000, and compared with this figure the forces of the colonies appear extremely small.

State.	Paid.	Partially Paid.	Unpaid.	Total Forces.
New South Wales	123	5,104	3,342	8,569
Victoria	387	3,560	2,101	6,048
Queensland	284	2,945	657	3,886
South Australia	34	1,320	.....	1,354
Western Australia	42	1,801	.....	1,843
Tasmania	21	225	1,607	1,853
Commonwealth	891	14,955	7,707	23,553
New Zealand	288	.....	6,742	7,030
Australasia	1,179	14,955	14,449	30,583

In addition to the above there are in New South Wales, Victoria, Queensland, and South Australia civilian rifle clubs, with a total membership of over 18,000 men, who have been enrolled as a volunteer reserve force. These men are all trained to the use of the rifle, and have a slight knowledge of drill, and would be available in time of war to complete the establishment of the regular forces. Under the provisions of the Defence Acts in Queensland and South Australia the police receive a certain amount of military training, and in case of emergency may be called upon to perform military service.

The relative strength of the various arms in the Commonwealth States may be summarised as follows:—

Staff, and all arms not enumerated	971
Artillery	4,126
Engineers	628
Cavalry	1,285
Mounted Rifles	2,063
Infantry	14,480

making a total strength, as shown above, of 23,553 men.

In addition to the military forces enumerated, all the colonies, with the exception of Tasmania and Western Australia, have small corps of Naval Volunteer Artillery, or partially-paid forces of a similar character, capable of being employed either as light artillery land forces or on board the local war vessels. The strength of the marine forces of the colonies is as follows:—

New South Wales	583
Victoria	309
Queensland	530
South Australia	160
Commonwealth	1,582
New Zealand	805
Australasia	2,387

For many years the question has been discussed of organising reserve forces in the colonies for the Imperial navy, and early in 1899 the

ERRATA.

For Table, page 310, *read*

State.	Paid.	Partially Paid.	Unpaid.	Total Forces.
New South Wales	824	4,440	3,305	8,569
Victoria	387	3,560	2,101	6,048
Queensland	234	2,945	657	3,886
South Australia	34	1,320	.....	1,354
Western Australia	42	1,801	.....	1,843
Tasmania	21	225	1,607	1,853
Commonwealth	1,592	14,291	7,670	23,553
New Zealand.....	288	.....	6,742	7,030
Australasia	1,880	14,291	14,412	30,583

Admiralty forwarded a despatch to the various colonies outlining a scheme to give effect to the proposal. In July, 1899, a conference of naval officers, representing New South Wales, Victoria, Queensland, and South Australia, was held at Melbourne, when it was decided that it would be impossible to raise a reserve force in Australasia on the conditions prescribed by the Admiralty, and it was deemed expedient to defer further consideration of the question till the establishment of a central authority under Federation.

On their present footing the combined forces of all the Australasian colonies are nearly 33,000 strong, as will be seen above, and of these over 20,000 could be mobilised in a very short time in any one of the colonies of Queensland, New South Wales, Victoria, or South Australia. Most of the colonies have also cadet companies, consisting of youths attending school, who are taught the use of arms so as to fit them, on reaching manhood, for taking a patriotic share in the defence of their country.

The outbreak of hostilities with the Boers in October, 1899, served to demonstrate the strength of the loyalty of these colonies to the mother country. From all parts of Australasia members of the various defence forces, as well as civilians, volunteered for service with the Imperial troops in South Africa. The total number of men despatched in the various contingents was 8,334, comprising 4,174 regular troops, chiefly infantry and mounted infantry, and 4,160 irregular troops (bushmen). The table below shows the number of men and horses sent from each colony :—

State.	Regular Troops.		Bushmen.		Total.	
	Men.	Horses.	Men.	Horses.	Men.	Horses.
New South Wales	1,364	1,193	1,280	1,353	2,644	2,546
Victoria	514	447	905	1,135	1,419	1,582
Queensland	417	458	705	918	1,122	1,376
South Australia	245	156	330	397	575	553
Western Australia	233	255	242	267	475	522
Tasmania	127	4	175	188	302	192
Commonwealth	2,900	2,513	3,637	4,258	6,537	6,771
New Zealand	1,274	2,127	525	533	1,797	2,660
Australasia	4,174	4,640	4,160	4,791	8,334	9,431

In addition to the above, several special service officers were, at the request of the colonial Governments, attached to the British troops for the purpose of gaining experience, and 14 nurses were despatched from New South Wales.

The colonies again offered to assist Great Britain on the outbreak of hostilities in China. The Imperial Authorities accepted the offer, and contingents of naval volunteers were despatched from New South Wales and Victoria numbering 260 and 200 men respectively, while South Australia equipped and sent the gunboat Protector.

Naval Defence.

The boundaries of the Australian Naval Station have been defined as follow:—From 95° E. long. by the parallel of 10° S. lat. to 130° E. long.; thence north to 2° N. lat., and along that parallel to 136° E. long.; thence north to 12° N. lat., and along that parallel to 160° W. long.; thence south to the Equator, and east to 149° 30′ W. long.; bounded on the south by the Antarctic Circle; and including the numerous groups of islands situated within the limits specified.

The defence of the Australasian coast is entrusted to the British ships on the Australian Station and the Australasian Auxiliary Squadron. Sydney, the head-quarters of the fleet, ranks as a first-class naval station, and extensive repairing yards and store-houses have been provided for the accommodation of the ships of war. The vessels of the Imperial fleet are detailed below. The Penguin and Dart are engaged in surveying service.

Name.	Class.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament. Guns.	Speed.	Coal endurance. Coal that can be carried in bunkers.	Coal endurance. Distance that can be steamed at 10 knots' speed.
		tons.		ft. in.	ft. in.	ft. in.		knots.	tons.	knots.
Royal Arthur	Twin-screw cruiser, 1st class, protected.	7,700	10,000	24 10	360 0	60 8	One 9·2-in. B.L., 12 6-in. B.L.Q.F., 12 6-Pr., 5 3-Pr., 7 Nordenfeldt.	19·75	1,250	10,000
Porpoise	Twin-screw cruiser, 3rd class.	1,770	3,500	15 4	225 0	36 0	Six 6-in. 5-ton B.L.V.C.P. 8 3-Pr., 2 Nordenfeldt.	16·5	325	7,000
Mohawk	Twin-screw cruiser, 3rd class.	1,770	3,500	15 7	225 0	36 0	Six 6-in. 5-ton B.L.V.C.P. 8 3-Pr., 2 Nordenfeldt.	16·5	325	7,000
Royalist..	Screw cruiser, 3rd class.	1,420	1,510	16 11	200 0	38 0	Two 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.	13·1	425	6,600
Ringdove	Screw gunboat, 1st class.	805	1,200	13 2	165 0	31 0	Six 4-in. 25-cwt. B.L., 2 3-Pr., 2 Nordenfeldt.	12·0	128	2,500
Goldfinch	Screw gunboat, 1st class.	805	1,200	13 3	165 0	30 0	Six 4-in. 26-cwt. B.L.R., 2 Q.F. Hotchkiss, 2 M.	13·0	105	..
Torch ..	Screw sloop..	960	1,100	14 6	180 0	32 6	Six 4-in. Q.F., 4 3-Pr. Q.F. Hotchkiss, 2 0·45-in. Maxim.	13·25	130	2,000
Penguin .	Screw sloop..	1,130	700	14 0	180 0	38 0	Two 64-pr. M., 1 L., 2 M.	10·0	200	..
Dart	Screw yacht..	470	250	12 11	133 0	25 2	2 L., 2 M.....	8·8	64	..

Q.F., Quick-firing guns; M., Machine guns; L., Light guns under 15 cwt.; B.L.R., Breech-loading rifled guns; V.C.P., Vavasseur Centre Pivot.

The Royal Arthur has no armour, but carries a protective deck of steel, varying in thickness from 1 to 5 inches. Her 6-inch guns are also enclosed in casemates of steel 6 inches thick.

As opportunity offers, the Admiral of the Fleet is empowered to grant commissions, for periods not exceeding six months, to officers of the naval forces of the colonies, in order that they may gain some experience of the conditions under which modern naval warfare is practised. Six cadetships and three engineer studentships in the Imperial Navy are given annually to Australian boys, who must not be less than 14½ nor more than 15½ years of age to qualify for the former, and not less than 14 nor more than 17 years of age for the latter appointments. The cadets undergo a course of instruction for two years on board the Britannia training-ship before they receive a commission.

An undertaking has been entered into by all the colonies for the payment of a *pro rata* subsidy towards the maintenance of an auxiliary fleet. The total subvention to be paid amounts to £126,000 per annum, made up of £91,000 for maintenance, and £35,000 as interest charge on the cost of construction, at the rate of 5 per cent. per annum, the contribution of each colony being determined on the basis of population. The distribution of the subsidy in 1899-1900, was as follows :—

	£
New South Wales	37,973
Victoria	32,749
Queensland	13,585
South Australia	10,439
Western Australia	4,816
Tasmania	5,134
New Zealand	21,304
Australasia	£126,000

The fleet consists of five fast cruisers and two torpedo gunboats of the Archer (improved type) and Rattlesnake classes of the British Navy. Three cruisers and one gunboat are continuously kept in commission, and the remainder are held in reserve in Australasian ports, ready for commission whenever circumstances may require their use. At the present time the vessels in reserve are the Katoomba, Mildura, Tauranga, and Karrakatta, the Katoomba being used as guard-ship. The agreement is for a period of ten years, and is then or at the end of any subsequent year terminable, provided two years' notice has been given. It has lately been decided that the agreement shall remain in force until the Federal Government shall consider the question of Australian Defence. The vessels have been built by the British Government; and the Australasian Governments have no voice whatever in the management of the vessels, nor any control over their movements. On the termination of the agreement the vessels will remain the property of the Imperial Government. The strength of the British fleet in Australian waters before the agreement was entered into is maintained independently of the presence of the Australasian vessels. The squadron is commanded by the Admiral on the Australian Station, whose head-quarters are in Sydney, where a residence is provided for

him by the colony of New South Wales. The squadron, which arrived in Port Jackson on the 5th September, 1891, consists of the following vessels :—

Name.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament.		Speed.	Coal endurance.	
						Guns.	Torpedo tubes.		Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots' speed.
	tons.		ft. in.	ft. in.	ft. in.			knots.	tons.	knots.
Katoomba	2,575	7,500	17 6	265 0	41 0	Eight 4·7 Q.F. guns, eight 3-pr. Q.F. guns, one 7-pr. M.L.R. gun (boat and field), four 4·45-in. 5-barrel Nordenfeldt.	4	16·5	300	6,000
Ringarooma ..	2,575	7,500	17 6	265 0	41 0		4	16·5	300	6,000
Mildura	2,575	7,500	16 6	265 0	41 0		4	16·5	300	6,000
Wallaroo	2,575	7,500	17 3	265 0	41 0		4	16·5	300	6,000
Tauranga	2,575	7,500	17 6	265 0	41 0		4	16·5	300	6,000
Boomerang ..	735	3,500	10 8	230 0	27 0	Two 4·7 in. Q.F. guns, four 3-pr. Q.F. guns.	3	*18·75	160	2,500
Karrakatta ..	735	3,500	10 9	230 0	27 0		3	*18·75	160	2,500

* This speed can be increased until, under favourable conditions, for a short period, a maximum of 21 knots can be obtained. Q.F.—Quick-firing guns. M.L.R.—Muzzle-loading rifled guns.

The Boomerang and Karrakatta are classed as torpedo gun-boats; all the other vessels are third-class screw cruisers. The hull of each vessel is of steel. The deck armour over machinery space is 2-in. and 1-in., and the conning-towers are protected by 3-inch armour, except in the case of the torpedo gun-boats, the towers of which have 1-in. armour. Each of the cruisers carries four, and each of the torpedo gun-boats three torpedo tubes. In the event of any of the squadron being lost, the vessel is to be replaced by the British Government.

The only war vessels which the colony of New South Wales possesses are two small torpedo boats, the Acheron and the Avernus, which are manned by the Naval Artillery Volunteers.

Victoria has the following vessels available for harbour defence :—

Name.	Class.	Displacement.	Armament.
		tons.	
Cerberus	Armoured turret ship (twin screw).	3,480	Four 10-in. 18-ton M.L.R., two 14-pdr. Q.F., six 6-pdr. Q.F., four 1-in. Nordenfeldts, 4 barrels.
Countess of Hopetoun	First-class steel torpedo boat.	120	Three 14-in. Mark IX R.G.F. torpedoes, and two 2-barrel Nordenfeldt 1-in. M. guns.
Childers	do do ..	63	Two 14-in. Fiume torpedoes, and two 1-pdr. Hotchkiss Q.F. guns.
Nepean	Second-class steel torpedo boat.	12	Two 14-in. Mark IV Fiume torpedoes.
Lonsdale	do do ..	12	do do do
Gordon	Wooden torpedo boat ..	12	Two 14-in. Mark IV Fiume torpedoes, three 2-barrel 1-in. Nordenfeldt guns.
Commissioner	Wooden steam launch....	40	Spar torpedoes, and dropping gear for two 14-in. R L. torpedoes.
Customs No. 1....	do do ..	30	do do do

In addition to the vessels mentioned, Victoria formerly had in commission two steel gunboats, the Victoria and the Albert, the wooden frigate Nelson, and the armed steamer Gannet. In consequence of the promulgation of an opinion by the Colonial Defence Committee that where there are complete fixed defences floating defences do not add to the strength of a place, but in most cases even tend to weaken it, by interfering with and limiting the arcs of fire of the battery guns, it was decided to dispose of the vessels named, and to give up the use of the Melbourne Harbour Trust's hopper barges, the Batman and the Fawkner. In 1896 the Government of Western Australia purchased the gunboat Victoria, with the intention of employing it in surveying service; and the frigate Nelson was sold in 1898 to be broken up.

Queensland has two gunboats, one of which, the Paluma, was formerly employed on survey service on the coast of Queensland at the joint expense of the Queensland and British authorities. Afterwards, the Paluma was lent to the Imperial Government; and, since handed back to Queensland in April, 1895, has been placed in reserve. The other gunboat, the Gayundah, was paid off and placed in reserve on the 30th September, 1892, and recommissioned on the 1st December, 1898. Particulars of the vessels available for the defence of Queensland ports are given below:—

Name.	Class.	Displacement.	Armament.
		Tons.	
Gayundah.....	Steel gunboat (twin screw)	360	One 8-in. B.L., one 6-in. B.L. Armstrong, two 3-pdr. 1½-in. Nordenfeldts, two 1-in. four-barrelled Nordenfeldts, one 0·45-in. five-barrelled Nordenfeldt.
Paluma	do ..	360	One 6-in. B.L.; two 5-in. B.L.; two 1½-in. Q.F. Nordenfeldts; one 1-in. four-barrelled Nordenfeldt; one 0·45-in. five-barrelled Nordenfeldt.
Otter	Tender (twin screw).....	290	One 64-pounder, M.L.R.
Stingaree	do	450	One gun.
Midge.....	Steam pinnace	....	Three machine guns.
Mosquito	Second-class steel torpedo boat.	....	One machine gun.

South Australia maintains one twin-screw steel cruiser, the Protector, of 920 tons, and an auxiliary gun vessel. The armament of the Protector consists of one 8-in. 12-ton B.L., five 6-in. 4-ton B.L., four 3-pdr. Q.F., and five improved Gatling machine guns; while the auxiliary gun vessel carries two 6-in. 5-ton B.L. guns. Tasmania owns one Whitehead torpedo boat. Western Australia has the steel gunboat Victoria, purchased from the Victorian Government, and the Meda, a schooner of 150 tons, which are employed on survey service at the joint expense of the Imperial and Colonial Governments. New Zealand possesses four Thorneycroft torpedo boats and four steam launches fitted for torpedo work.

Cost of Defence.

Most of the colonies have spent considerable sums in works of defence, and the principal ports are well protected by extensive fortifications, erected by the various Governments. The total expenditure from the Consolidated Revenue for defence purposes during 1898-9 was as follows :—

State.	Amount.	Per head.
	£	s. d.
New South Wales	243,734	3 7
Victoria	197,933	3 5
Queensland	94,402	4 0
South Australia	32,405	1 9
Western Australia	16,963	2 0
Tasmania	12,707	1 5
Commonwealth	598,144	3 3
New Zealand	114,789	3 1
Australasia	£712,933	3 2

In all the colonies, with the exception of Western Australia, a certain amount of money has been spent out of loans for purposes of defence. Victoria, however, from 1872 to 1899 did not expend loan moneys on this service. The amounts thus spent during 1898–9 were as follow :—

	£
New South Wales	*54,917
Victoria	34,827
Queensland	13,342
South Australia	3,402
Tasmania	604
Commonwealth	107,092
New Zealand	24,025
Australasia	£ 131,117

*Inclusive of £1,567 for naval station, Port Jackson.

The total loan expenditure by each colony for defence purposes to the end of the financial year 1898-9 was as follows :—

State.	Amount.	Per head.
	£	s. d.
New South Wales	*1,328,106	19 9
Victoria	133,126	2 4
Queensland	242,566	10 2
South Australia	242,810	13 2
Tasmania	122,027	13 7
Commonwealth	2,068,635	11 2
New Zealand	979,633	26 1
Australasia	£3,048,268	13 8

*Inclusive of £312,481 for naval station, Port Jackson.

This does not represent the whole cost of the fortifications, as large sums have from time to time been expended from the general revenues of the colonies in the construction of works of defence; the amount of such payments, however, it is now impossible to determine.

In 1890 a military commission was appointed by the Imperial and the different Australian Governments to take evidence and report on the question of fortifying King George's Sound, Hobart, Thursday Island, and Port Darwin, at the joint expense of the colonies. The commission visited the points mentioned during 1891, and as a result of the evidence taken fortifications have been erected at King George's Sound and Thursday Island, and it is probable that similar works will be begun at Hobart and Port Darwin in the near future. On 11th March, 1892, the four colonies New South Wales, Victoria, Queensland, and South Australia entered into a contract with Western Australia, to contribute to the cost of the defence of Albany. The agreement provides that one-fourth of the total expense shall be defrayed by Western Australia, and three-fourths by the other colonies, the proportion to be paid by each to be calculated on the basis of its population. Western Australia provides the garrison and has general superintendence. A similar agreement was made on the 1st January, 1893, between the same five colonies for the defence of Thursday Island. In this instance each colony contributes towards the total expense of maintaining the garrison in proportion to its population.

SHIPPING.

THE earliest date for which there is reliable information in regard to the shipping of Australasia is the year 1822. Since that time the expansion of the trade of these colonies has been marvellous, and although population has increased at a high rate, yet the growth of shipping has been even more rapid. In the table given below the increase in the number and tonnage of vessels may be traced. It is necessary to point out that the figures include the intercolonial traffic, and are, therefore, of little value in a comparison between the shipping trade of Australasia and that of other countries, as the vessels plying between the various colonies represent merely coasting trade when Australasia is considered as a whole. This distinction is kept in view throughout this chapter, as well as in the succeeding one dealing with commerce :—

Year.	Entered and Cleared.		Year.	Entered and Cleared.	
	Vessels.	Tonnage.		Vessels.	Tonnage.
1822	268	147,869	1871	13,274	4,229,904
1841	2,576	552,347	1881	15,935	8,943,545
1851	5,340	1,088,108	1891	18,468	17,479,535
1861	10,316	2,828,484	1899	18,073	22,996,134

In the year 1822 all the settlements on the mainland were comprised in the designation of New South Wales, and as late as 1859 Queensland formed part of the mother colony. Thus an exact distribution of shipping amongst the states comprising the Commonwealth and New Zealand can be made only for the period subsequent to the year last named. Such a division of the total tonnage entered and cleared is

made in the following table for the four census years commencing with 1861, as well as for the year 1899 :—

State.	Total Tonnage Entered and Cleared.				
	1861.	1871.	1881.	1891.	1899.
New South Wales	745,696	1,500,479	2,786,500	5,694,236	6,995,551
Victoria	1,090,002	1,355,025	2,412,534	4,715,109	5,341,455
Queensland	44,645	93,236	882,491	997,118	1,464,063
South Australia	199,331	387,026	1,359,591	2,738,589	3,619,251
Western Australia	115,256	137,717	285,046	1,045,555	2,638,648
Tasmania	230,218	216,160	383,762	1,044,606	1,318,117
Commonwealth	2,425,148	3,689,643	8,109,924	16,235,213	21,377,085
New Zealand	403,336	540,261	833,621	1,244,322	1,619,049
Australasia	2,828,484	4,229,904	8,943,545	17,479,535	22,996,134

The tonnage of 1891 exceeded that of any preceding year. This result was not altogether due to the actual requirements of the trade of that year, as, in consequence of the maritime strike, a large quantity of goods remained unshipped at the close of 1890, and helped to swell the returns for the succeeding twelve months. It was not until 1895 that the tonnage of 1891 was again reached; but since 1895 there has been a great expansion of shipping, and 1899 showed not only the largest total tonnage recorded but the greatest for each individual state.

Below will be found the proportion of the tonnage of each state and of New Zealand to the total shipping of Australasia in the five years quoted above :—

State.	Percentage of Total of Australasia.				
	1861.	1871.	1881.	1891.	1899.
New South Wales	26·4	35·5	31·1	32·6	30·4
Victoria	38·5	32·0	27·0	27·0	23·2
Queensland	1·8	2·2	9·9	5·7	6·4
South Australia	7·0	9·1	15·2	15·6	15·7
Western Australia	4·0	3·3	3·2	6·0	11·5
Tasmania	8·1	5·1	4·3	6·0	5·8
New Zealand	14·2	12·8	9·3	7·1	7·0
Australasia	100·0	100·0	100·0	100·0	100·0

It will be seen that in 1861 the shipping of New South Wales was largely exceeded by that of Victoria, but that by 1871 the mother colony had assumed the leading position. It cannot be claimed that these figures have much meaning, and they would not have been repeated

in this work, except for the purpose of showing how easy it is to make fallacious comparisons from reasonably correct data. Queensland appears almost last amongst the states in point of tonnage, yet, unquestionably, that state ranks third as regards the importance of its trade. The explanation of the discrepancy between the real and apparent trade lies in the fact which will hereafter be reverted to, that the same vessels are again and again included as distinct tonnage in the returns of the southern states. A mail-boat which calls at Albany, in Western Australia, continues its voyage to Sydney by way of Adelaide and Melbourne, sometimes calling at Hobart, and figures as a separate vessel at each port. This is not the case to so large an extent in regard to Queensland, so that the figures quoted are only of value as indicating the comparative progress of the trade of each separate state, and not the progress of one state as compared with another.

Intercolonial Shipping.

Of the total shipping of Australasia, which has been dealt with in the preceding section, a proportion of nearly 62 per cent. is represented by trade between the various colonies. In the following table will be found the number and tonnage of vessels entered at the ports of each colony from the other provinces. As a rule, the expansion of the trade of a colony with its neighbours has kept pace with the growth of its commerce with outside countries. To this general statement New Zealand forms an exception, on account of the development of its resources to such a point that it has been enabled to enter into direct commercial relations with the United Kingdom, instead of trading, as formerly, by way of the ports of New South Wales or Victoria:—

State.	Entered from other Colonies.					
	1881.		1891.		1899.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales	1,730	939,158	2,375	1,847,435	2,471	2,074,950
Victoria	1,733	780,633	2,067	1,542,369	1,614	1,739,615
Queensland	663	268,593	405	277,055	440	470,897
South Australia	837	412,493	778	690,488	762	1,086,666
Western Australia	95	74,020	155	242,004	365	770,945
Tasmania	654	175,439	724	409,147	747	532,916
New Zealand	457	227,284	475	351,227	382	423,616
Australasia	6,169	2,877,620	6,979	5,359,725	6,781	7,099,605

As the above table shows, nearly one-third of the total tonnage entered from other colonies comes to New South Wales, but this is in

great measure due to the fact that many vessels discharging in other colonies proceed to Newcastle, in New South Wales, to load coal for foreign ports.

State.	Cleared for other Colonies.					
	1881.		1891.		1899.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales	1,507	766,896	2,146	1,574,841	2,327	2,003,963
Victoria	1,889	894,629	2,265	1,842,183	1,678	1,847,130
Queensland	679	331,459	423	326,808	406	439,166
South Australia	871	467,867	891	872,654	833	1,206,032
Western Australia	102	71,826	159	269,592	326	658,482
Tasmania	661	180,644	768	489,350	731	606,954
New Zealand	422	199,517	447	287,332	359	382,700
Australasia	6,131	2,912,838	7,099	5,662,760	6,660	7,144,427

A comparison of the figures given above with those in the preceding table shows that in the case of Victoria and South Australia the tonnage cleared is largely in excess of that entered. This partly arises from the necessity of many vessels clearing at the southern ports in ballast and proceeding for outward cargo to New South Wales ports, principally Newcastle, where on their outward voyage such vessels are, of course, reckoned amongst the external shipping.

The combined tonnage entered and cleared during 1881, 1891, and 1899, with the percentage for each state and New Zealand to the total external shipping of Australasia, will be found below :—

State.	Entered from and Cleared for other Colonies.					
	Total Tonnage.			Percentage of Total.		
	1881.	1891.	1899.	1881.	1891.	1899.
New South Wales	1,706,054	3,422,276	4,078,913	29·5	31·0	28·6
Victoria	1,675,262	3,384,552	3,586,745	28·9	30·7	25·2
Queensland	600,052	603,863	910,063	10·4	5·5	6·4
South Australia	880,360	1,563,142	2,292,698	15·2	14·2	16·1
Western Australia	145,846	511,596	1,429,427	2·5	4·6	10·0
Tasmania	356,083	898,497	1,139,870	6·2	8·2	8·0
New Zealand	426,801	638,559	806,316	7·3	5·8	5·7
Australasia	5,790,458	11,022,485	14,244,032	100·0	100·0	100·0

External Shipping.

It has been explained that in any comparison between the shipping of Australasia and that of other countries the intercolonial trade would have to be excluded; but even then the tonnage would be too high, because of the inclusion of mail-steamers and other vessels on the same voyage in the returns of several of the colonies. However, it is scarcely possible to amend the returns so as to secure the rejection of the tonnage which is reckoned twice over; and in considering the following statement, showing the shipping trade of these colonies with countries beyond Australasia, this point should be borne in mind :—

Division.	1871.		1881.		1891.		1899.	
	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.
United Kingdom—								
Entered	305	294,321	768	999,403	967	1,863,664	741	1,887,816
Cleared	288	266,432	491	651,825	753	1,484,745	867	2,089,412
Total	593	560,753	1,259	1,651,228	1,720	3,348,409	1,608	3,977,228
British Possessions—								
Entered	320	133,127	623	393,234	511	536,879	778	941,950
Cleared	337	163,350	596	374,753	463	469,453	590	703,823
Total	657	296,477	1,219	767,987	974	1,006,332	1,368	1,645,773
Foreign Countries—								
Entered	449	192,377	519	302,607	754	938,662	788	1,542,915
Cleared	645	229,809	638	431,265	942	1,163,647	868	1,586,186
Total	1,094	422,186	1,157	733,872	1,696	2,102,309	1,656	3,129,101
All External Trade—								
Entered	1,074	619,825	1,910	1,695,244	2,232	3,339,205	2,307	4,372,681
Cleared	1,270	659,591	1,725	1,457,843	2,158	3,117,845	2,325	4,379,421
Total	2,344	1,279,416	3,635	3,153,087	4,390	6,457,050	4,632	8,752,102

The external shipping of Australasia during 1899 was the highest in the history of the country, being fully 35 per cent. more than the tonnage entered and cleared in 1891, when trade was inflated by the shipment of goods left over from the previous year on account of the maritime strike. A distribution of the traffic amongst the leading divisions of the British Empire and the principal foreign

countries with which the colonies have commercial relations will be found below :—

Country.	Entered from and cleared for Countries beyond Australasia.					
	1881.		1891.		1899.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels	Tonnage.
British Empire—						
United Kingdom	1,259	1,651,228	1,720	3,348,409	1,608	3,977,228
India and Ceylon.....	167	272,199	142	286,319	120	258,177
Hong Kong	244	257,011	227	324,820	230	351,214
Cape Colony	133	54,949	72	66,211	277	402,746
Fiji	153	43,255	153	127,189	116	106,068
Other British Possessions	522	140,573	380	201,793	625	527,568
Total, British	2,478	2,419,215	2,694	4,354,741	2,976	5,623,001
Foreign Countries—						
France and New Caledonia	224	113,215	275	417,064	261	539,075
Germany	27	15,786	208	393,001	259	824,286
Netherlands and Java...	67	35,719	51	74,843	39	70,304
Belgium	2	1,552	27	41,907	42	85,802
United States	294	301,246	484	597,210	352	661,459
China	81	53,996	34	33,135	15	22,754
Other Foreign Countries	462	212,358	617	545,149	688	925,421
Total, Foreign.....	1,157	733,872	1,696	2,102,309	1,656	3,129,101
All External Tonnage	3,635	3,153,087	4,390	6,457,050	4,632	8,752,102

As the following table shows, the largest share of the external tonnage of Australasia falls to New South Wales, which takes one-third of the total; Victoria comes next with one-fifth, followed by South Australia with about one-seventh. The figures in the chapter on commerce, however, give a better idea of the relative importance of the provinces in

external trade, as the tonnage of the mail-steamers entered and cleared at Albany and Port Adelaide is out of all proportion to the goods landed and shipped there:—

State.	Entered and Cleared.						Percentage of each State to Total.		
	1881.		1891.		1899.				
	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.	1881.	1891.	1899.
New South Wales	1,120	1,080,446	1,600	2,271,960	1,620	2,916,638	34·3	35·2	33·3
Victoria	626	737,272	759	1,330,557	763	1,754,710	23·4	20·6	20·0
Queensland	461	282,439	342	393,255	446	554,000	8·9	6·1	6·4
South Australia	541	479,231	760	1,175,447	595	1,326,553	15·2	18·2	15·2
Western Australia	171	139,200	284	533,959	662	1,209,221	4·4	8·2	13·8
Tasmania	68	27,679	86	146,109	74	178,247	0·9	2·3	2·0
Commonwealth ..	2,987	2,746,267	3,831	5,851,287	4,160	7,939,369	..	..	..
New Zealand	648	406,820	559	605,763	472	812,733	12·9	9·4	9·3
Australasia	3,635	3,153,087	4,390	6,457,050	4,632	8,752,102	100·0	100·0	100·0

A comparison between the shipping of the principal countries of the world and the external tonnage of Australasia is appended:—

Country.	Tonnage Entered and Cleared.		Country.	Tonnage Entered and Cleared.	
	Total.	Average per head.		Total.	Average per head.
United Kingdom.....	90,963,966	2·3	France	31,488,753	0·8
Russia in Europe ...	18,066,576	0·2	Spain	28,765,414	1·6
Norway	6,131,717	3·1	Italy	17,005,287	0·5
Sweden...	14,877,813	3·0	United States	39,881,044	0·6
Denmark	10,561,982	4·9	Argentine Republic	12,877,812	3·1
Germany	25,762,511	0·5	Canada	12,585,485	2·4
Netherlands.....	16,897,809	3·7	Cape Colony	5,602,955	2·5
Belgium	15,899,475	2·6	Australasia	8,752,102	1·9

On the basis of population, therefore, the colonies of Australasia exceed the great countries of the United States, France, Germany, Italy, Russia, and Spain in the amount of shipping trade.

Tonnage in Ballast.

A peculiar feature of the shipping trade of these colonies is the small though varying proportion of tonnage in ballast arriving from and departing for places beyond Australasia. Thus in the year 1881 this description of tonnage amounted to 4·3 per cent., and in 1891 to 3·5 per cent., of the total external shipping of the colonies; while in 1899, at 6·6 per cent., the proportion was comparatively high. The small increase during recent years is chiefly due to the larger number of vessels which come to New South Wales in quest of freights, the proportion of shipping in ballast for that colony being about 8 per cent. less than that for the United Kingdom. The total external tonnage entered and cleared in ballast during the years 1881, 1891, and 1899 was as follows:—

State.	Tonnage Entered and Cleared in Ballast.			Percentage of Tonnage in Ballast to Total External Tonnage.		
	1881.	1891.	1899.	1881.	1891.	1899.
New South Wales	22,376	74,976	313,239	2·1	3·3	10·7
Victoria	12,841	27,417	34,944	1·7	2·1	2·0
Queensland	25,378	25,868	12,507	9·0	6·6	2·2
South Australia	28,590	40,907	59,977	6·0	3·5	4·5
Western Australia	10,399	14,030	101,805	7·5	2·6	8·4
Tasmania	4,553	11,816	6,477	16·4	8·1	3·6
Commonwealth.....	104,137	195,014	528,949	3·8	3·3	6·7
New Zealand.....	30,622	30,650	47,305	7·5	5·1	5·8
Australasia	134,759	225,664	576,254	4·3	3·5	6·6

The reason why so small a proportion of Australasian shipping clears in ballast is principally to be found in the great and varied resources of the country; for when the staple produce—wool—is not available, cargoes of wheat, coal, copper, live-stock, frozen meat, and other commodities may generally be obtained. Besides, owing to the great distance of the ports of these colonies from the commercial centres of the old world, vessels are not usually sent out without at least some prospect of securing a return cargo. As a rule, it does not pay to send vessels to Australasia seeking freights, as is commonly done with regard to European and American ports. It is strong testimony, therefore, of the value of the trade of New South Wales to shipowners to find entered at the ports of that colony direct from outside countries the comparatively large quantity of 301,495 tons of shipping in ballast, 18,240 of which came from Japan, 19,791 from Natal, 21,462 from Mauritius, 47,257 from South American ports, and 123,609 from Cape Colony.

The proportion of tonnage in ballast to the total shipping of some of the principal countries of the world is subjoined :—

Country.	Percentage of Shipping in Ballast.	Country.	Percentage of Shipping in Ballast.
United Kingdom	18·7	Belgium	27·0
Russia in Europe	35·0	France.....	19·7
Norway	26·7	Spain	26·9
Sweden	43·7	Italy	20·3
Germany.....	21·2	United States	18·5
Netherlands	26·2	Australasia.....	6·6

Nationality of Vessels.

The shipping trade of Australasia is almost entirely in British hands, as will be seen from the subjoined table, which deals with the total tonnage of the colonies, both intercolonial and external. Although direct communication with continental Europe has been established within recent years, and several lines of magnificent steamers have entered into the trade between Australia and foreign ports, yet the proportion of shipping belonging to Great Britain and her dependencies has only fallen from 92·9 to 84·8 per cent. during the period extending from 1881 to 1899 :—

Nationality.	Total Shipping Entered and Cleared.						Percentage of each Nationality.		
	1881.		1891.		1899.				
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	1881.	1891.	1899.
British.....	15,127	8,313,535	16,834	15,208,612	16,085	19,509,426	92·9	87·0	84·8
French	91	47,713	251	593,386	322	702,416	0·5	3·4	3·1
German	199	130,070	542	856,528	531	1,482,581	1·5	4·9	6·4
Scandinavian.....	133	66,566	336	304,977	444	312,588	0·7	1·7	1·4
American	308	328,540	382	383,933	399	520,507	3·7	2·2	2·3
Other nationalities.	77	57,121	123	132,099	292	468,616	0·7	0·8	2·0
Total	15,935	8,943,545	18,468	17,479,535	18,073	22,996,134	100·0	100·0	100·0

The returns published by the various colonies are not in such a form as to admit of the separation of the purely local tonnage from the other shipping of the Empire, and vessels owned in Australasia are classed in the above table as "British." The number and tonnage of the steam and sailing vessels registered in each of the colonies are given on page 331. Few of the large vessels employed in the intercolonial trade have been built in Australasia, and it is possible that the registrations do not represent the whole of the tonnage engaged in local waters.

Steam and Sailing Vessels.

The tendency to substitute steamers for sailing vessels, which is general throughout the world, is very marked in the Australasian trade. Unfortunately the records of Queensland and of the Northern Territory do not admit of the separation of the two classes of vessels, and this was the case also with regard to the colonies of South Australia and New Zealand until late years. It is not possible, therefore, to show the increase of steam tonnage for the whole of Australasia, but appended will be found the figures for the various colonies so far as they can be given :—

State.	Total Steam Tonnage entered and cleared.			Percentage of Steam to Total Tonnage.		
	1881.	1891.	1899.	1881.	1891.	1899.
New South Wales...	1,758,304	4,299,791	5,757,341	63·1	75·5	82·3
Victoria	1,787,861	4,091,057	4,955,847	74·1	86·8	92·7
South Australia* ...	†.....	2,007,775	3,089,428	†...	73·3	90·1
Western Australia..	210,664	978,568	2,335,432	73·9	93·6	88·5
Tasmania	265,833	960,224	1,264,401	69·3	91·9	95·9
New Zealand.....	†.....	822,086	1,343,118	†...	66·1	82·9

* Excluding Northern Territory. † Not obtainable.

The substitution of steam for sailing vessels in the shipping trade of some of the principal countries of the world may be gathered from the following table. The percentage for Australasia is calculated on the basis of the shipping of the colonies exclusive of that of Queensland and of the Northern Territory of South Australia :—

Country.	Percentage of Steam to Total Tonnage.	
	1881.	1898.
United Kingdom	67·7	90·5
Russia in Europe	74·3	95·7
Norway	31·1	61·5
Sweden.....	46·8	80·2*
Denmark	61·9	85·5
Germany	70·8	90·5
Netherlands.....	74·4	95·7
Belgium	81·3	96·4
France	69·5	95·0
Italy	72·8	92·0
United States	55·5	81·1
Argentine Republic	70·4	91·1
Australasia	68·6	87·8

* Percentage for year 1896.

A comprehensive view of the changes which have taken place during the last thirty-eight years in the class of vessel engaged in the inter-

colonial and the external shipping trade of Australasia is afforded by the following figures :—

Year.	Vessels.	Tonnage.	Crews.	Average Tonnage per vessel.	Average Tonnage per hand.
		INTERCOLONIAL SHIPPING.			
1861	8,355	1,751,628	122,280	210	14
1871	10,930	2,950,488	169,020	270	17
1881	12,300	5,790,458	324,951	471	18
1891	14,078	11,022,485	443,424	783	25
1899	13,441	14,244,032	444,894	1,060	32
		EXTERNAL SHIPPING.			
1861	1,961	1,076,856	52,440	549	21
1871	2,344	1,279,416	52,330	546	24
1881	3,635	3,153,087	129,826	867	24
1891	4,390	6,457,050	231,878	1,471	28
1899	4,632	8,752,102	337,913	1,889	26
		ALL AUSTRALASIAN SHIPPING.			
1861	10,316	2,828,484	174,720	274	16
1871	13,274	4,229,904	221,350	319	19
1881	15,935	8,943,545	454,777	561	20
1891	18,468	17,479,535	675,302	946	26
1899	18,073	22,996,134	782,807	1,272	29

As the table shows, the total number of vessels engaged in the shipping trade of Australasia during 1899 was 395 less than the figure for 1891, but the returns of tonnage show an increase of upwards of five and a half millions. The average tonnage of shipping is 1,272, as compared with 946 in 1891, and 274 in 1861. The explanation of this increase of course lies in the fact that a superior type of vessel is now engaged in the shipping trade of these colonies, and the enterprise of the great European and American trading companies will doubtless have the effect of raising still higher the average for succeeding years. It is somewhat remarkable to find that the vessels engaged in the intercolonial trade have more than kept pace in increase of tonnage with those trading between these colonies and other countries. Of course, the increase in the average tonnage of intercolonial vessels is represented as greater than it actually has been, because the mail-steamers on their way to Sydney are cleared at Albany, Adelaide, and Melbourne for the colonies further east; but when allowance has been made on this score, the improvement in the class of vessel trading in local waters will be found most noteworthy. It is well known, however, that the steamers running on the Australian coast favourably compare with those engaged in the coasting trade of the United Kingdom.

Relative Importance of Ports.

The relative importance of the various ports of Australasia may be ascertained by an inspection of the table given hereunder. Melbourne takes first place in the amount of tonnage; but the figures are inflated by the counting of the great ocean steamers as twice entering and twice clearing at Port Phillip. This remark applies equally to Port Adelaide and Albany. If allowance be made on this score, it will be found that Sydney has a larger quantity of shipping than any other Australasian port, and that it is followed by Melbourne, Newcastle, and Port Adelaide. In reference to the figures given for Queensland ports, it is necessary to point out that vessels are entered and cleared at all ports which they visit, and not at the first and last port of call only, and the quantity of tonnage shown is therefore in most cases greater than it ought to be represented :—

Port.	Tonnage entered and cleared.		
	1881.	1891.	1899.
New South Wales—			
Sydney	1,610,692	3,291,188	4,566,524
Newcastle	1,127,238	1,844,842	1,994,777
Wollongong	14,642	101,888	225,919
Victoria—			
Melbourne	2,144,949	4,362,138	4,947,118
Geelong	93,347	190,932	275,221
Queensland—			
Brisbane	406,032	855,993	1,297,758
Townsville	205,886	544,470	852,148
Rockhampton	207,706	471,837	552,162
Cooktown	217,144	469,577	310,763
Cairns	56,447	326,898	438,180
Mackay	104,174	330,119	383,385
South Australia—			
Port Adelaide	1,078,920	1,990,938	2,917,630
Port Pirie	33,325	321,781	341,912
Port Darwin	90,100	170,642	189,885
Western Australia—			
Albany	219,902	931,502	1,792,899
Fremantle	42,618	63,068	711,605
Tasmania—			
Hobart	204,007	646,683	757,071
Launceston	138,657	293,537	174,280
Davenport	.....	8,121	204,377
New Zealand—			
Auckland	238,886	345,183	526,178
Wellington	119,243	293,451	470,683
Bluff Harbour	91,592	196,540	237,178
Lyttelton	167,151	161,387	173,641
Dunedin	114,637	97,409	84,608

A better idea of the relative importance of the principal ports of the colonies is obtainable from the trade figures, which are given below for the year 1899 :—

Port.	Total Trade.	Average per ton of Shipping.	Port.	Total Trade.	Average per ton of Shipping.
New South Wales—	£	£	Western Australia—	£	£
Sydney	43,233,859	9·5	Fremantle	6,252,047	8·8
Newcastle	2,263,348	1·1	Albany	3,260,741	1·8
Victoria—			Tasmania—		
Melbourne	32,292,115	6·5	Hobart	1,528,840	2·0
Queensland—			Launceston	1,498,987	8·6
Brisbane	6,761,490	5·2	New Zealand—		
South Australia—			Wellington	3,963,402	8·4
Port Adelaide	9,072,781	3·1	Auckland	4,072,323	7·7

The comparative importance of the ports of Australasia may be seen by viewing them in connection with the shipping and trade of the chief ports of the United Kingdom, the 1898 figures for which are appended. It will be seen that in aggregate tonnage Melbourne is exceeded only by London, Liverpool, Cardiff, and Newcastle. Hull comes next on the list, having a slight lead over Sydney, which in turn exceeds Glasgow and all other British ports. In value of trade Sydney is exceeded only by London, Liverpool, and Hull. If Australasia be regarded as one country, however, the comparison is somewhat misleading, as the inter-colonial trade is included in the returns :—

Port.	Total Shipping.	Total Trade.	Port.	Total Shipping.	Total Trade.
England—	tons.	£	Scotland—	tons.	£
London	19,596,202	237,198,097	Glasgow	3,684,443	26,388,238
Liverpool	12,168,802	198,897,093	Leith	1,977,117	16,454,467
Cardiff	8,788,105	8,136,497	Kirkcaldy	1,693,005	1,086,746
Newcastle	5,610,867	9,631,510	Grangemouth.	1,482,279	4,569,820
Hull	4,627,480	52,424,207	Ireland—		
Southampton	2,923,611	23,001,612	Belfast	608,631	5,207,197
Sunderland	1,961,740	1,533,589	Dublin	311,191	2,498,745
Grimsby	1,876,321	18,418,859	Australasia—		
Dover	1,804,984	12,521,887	Sydney	4,566,524	43,233,859
Newport	1,620,881	1,888,296	Melbourne	4,947,118	32,292,115
Harwich	1,408,059	23,098,529	Brisbane	1,297,758	6,761,490
North Shields	1,290,670	1,573,978	Adelaide	2,917,630	9,072,781
Bristol	1,173,859	12,469,253	Fremantle	711,605	6,252,047
Newhaven	774,288	12,513,368	Hobart	757,071	1,528,840
			Wellington	470,683	3,963,402
			Auckland	526,178	4,072,323

The yearly movement of tonnage at Melbourne and Sydney far exceeds that of the ports of any other British possession, Hong Kong

and Singapore excepted. Two other exceptions might be mentioned—Gibraltar and Malta; but as these are chiefly ports of call, and the trade is very limited compared with the tonnage, they can scarcely be placed in the same category.

Registration of Vessels.

The number and tonnage of steam and sailing vessels on the registers of each of the seven colonies at the end of 1899 are given below :—

State.	Steam.		Sailing.		Total.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales	498	67,193	502	55,554	1,000	122,747
Victoria	148	60,964	233	37,837	381	98,801
Queensland	90	12,867	144	9,928	234	22,795
South Australia	108	28,445	227	22,421	335	50,866
Western Australia	30	5,442	135	6,653	165	12,095
Tasmania	44	6,485	156	8,894	200	15,379
New Zealand	212	52,770	310	40,753	522	93,523
Australasia	1,130	234,166	1,707	182,040	2,837	416,206

COMMERCE.

IT is reasonable to expect that the trade of these colonies would increase as quickly as the population; but as a matter of fact its growth for many years was much more rapid, and at the present time the total commerce of Australasia per head of population is exceeded by that of no country except Belgium, half of whose trade consists of goods in course of transit to and from the north-western and central parts of the continent of Europe. Below will be found a statement of the trade of Australasia for various periods since the year 1825, prior to which date no information is available :—

Year.	Trade of Australasia.	
	Total Value.	Value per head.
	£	£ s. d.
1825	511,998	10 13 11
1841	5,573,000	22 4 0
1851	8,957,610	18 10 7
1861	52,228,207	41 19 10
1871	69,474,084	35 18 4
1881	101,710,967	36 12 7
1891	144,766,285	37 13 7
1892	122,761,263	31 2 10
1893	117,172,258	29 2 0
1894	109,691,901	26 13 8
1895	112,810,793	26 17 8
1896	129,139,621	30 3 4
1897	138,101,106	31 12 7
1898	147,287,268	33 2 11
1899	161,248,140	36 4 6

It will be seen that the average value of trade per inhabitant increased by £1 15s. 3d. during the twenty years extending from 1871

to 1891, of which the period from 1881 to 1891 accounted for no less than £1 1s. This, however, does not show the full extent of the growth in trade, for the prices of produce—especially of wool, which has been the staple product of these colonies since very early years—had fallen heavily during the same period. From 1891 till 1894, the trade of Australasia seriously declined, a state of affairs partly brought about by the continued fall in prices and partly resulting from the financial crisis of 1893. Since 1894, however, as shown by the table, the value has steadily increased, reaching its maximum in 1899 with a sum of £161,248,140, the largest total yet recorded, and thus proving that the colonies have now shaken off to a great extent the ill effects of the period of depression.

The following series of tables shows the distribution of the total trade of Australasia, and also of the Australian Commonwealth, for the years 1881, 1891, and 1899, with the average value per head of population. The first table represents the imports :—

State.	Total Value of Imports.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	17,587,012	25,383,397	25,594,315	23 2 7	22 3 11	19 0 6
Victoria	16,718,521	21,711,608	17,952,894	19 4 3	18 19 1	15 9 1
Queensland	4,063,625	5,079,004	6,764,097	18 5 8	12 12 11	14 3 8
South Australia	5,320,549	10,051,123	6,987,284	19 4 3	31 2 4	18 19 9
Western Australia	404,831	1,280,093	4,473,532	13 14 3	25 2 5	26 7 7
Tasmania	1,431,144	2,051,964	1,769,324	12 5 0	13 15 6	9 16 10
Commonwealth	45,525,682	65,557,189	63,541,446	19 18 7	20 9 0	17 3 4
New Zealand	7,457,045	6,503,849	8,739,633	15 2 7	10 6 6	11 13 1
Australasia	52,982,727	72,061,038	72,281,079	19 1 7	18 15 1	16 4 9

The values of the total exports for the same years were as given below :—

State.	Total Value of Exports.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	16,307,805	25,944,020	28,445,466	21 9 0	22 13 9	21 2 11
Victoria	16,252,103	16,006,743	18,567,780	18 13 6	13 19 6	15 19 7
Queensland	3,540,366	8,305,387	11,942,858	15 18 6	20 13 6	25 0 9
South Australia	4,508,754	10,642,416	8,509,505	16 5 7	32 19 0	23 2 7
Western Australia	502,770	799,466	6,985,642	17 0 8	15 13 9	41 3 10
Tasmania	1,555,576	1,440,818	2,577,475	13 6 3	9 13 5	14 6 9
Commonwealth	42,667,374	63,138,850	77,028,726	18 13 6	19 14 0	20 16 3
New Zealand	6,060,866	9,566,397	11,938,335	12 5 11	15 3 10	15 18 4
Australasia	48,728,240	72,705,247	88,967,061	17 11 0	18 18 6	19 19 9

The total trade, similarly classified, was as follows :—

State.	Value of Total Trade.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	33,894,817	51,327,417	54,039,781	44 11 7	44 17 8	40 3 5
Victoria	32,970,624	37,718,351	36,520,674	37 17 9	32 18 7	31 8 8
Queensland	7,603,991	13,384,391	18,706,955	34 4 2	33 6 5	39 4 5
South Australia	9,829,303	20,693,539	15,496,789	35 9 10	64 1 4	42 2 4
Western Australia	907,601	2,079,559	11,459,174	30 14 11	40 16 2	67 11 5
Tasmania	2,986,720	3,492,782	4,346,799	25 11 3	23 8 11	24 3 7
Commonwealth	88,193,056	128,696,039	140,570,172	38 12 1	40 3 0	37 19 7
New Zealand	13,517,911	16,070,246	20,677,968	27 8 6	25 10 4	27 11 5
Australasia	101,710,967	144,766,285	161,248,140	36 12 7	37 13 7	36 4 6

The point most notable in this series of tables is the very marked impetus which the trade of South Australia received during the period 1881–91—a trade of £64 1s. 4d. per inhabitant, the value transacted by that colony during 1891, being almost without parallel in any important country. This huge trade was, however, not drawn altogether from its own territory, for in 1891 more than £5,731,000, or about £17 15s. per inhabitant, and in 1899, £3,068,000, or £8 6s. 9d. per inhabitant, was due to the Barrier District of New South Wales, of which South Australia is the natural outlet; and it must also be remembered that considerable quantities of goods on their way to Broken Hill are entered as imports in South Australia when they arrive in that colony, and as exports to New South Wales when they cross the border. Of the total shrinkage of £21 19s. per head from 1891 to 1899, £6 8s. 1d. must be attributed to the falling-off in the Barrier trade.

The trade of New South Wales in 1891 was valued at no less than £51,327,417. Five years later, owing in great measure to the same influences as affected the trade of Australia generally, the total had fallen to £43,571,859; but for 1899, the last year shown in the table, the total stood at £54,039,781, the largest amount yet recorded. In 1899, the returns for imports, exports, and total trade are in every case higher than the corresponding figures for 1881, while, as compared with 1891, Victoria and South Australia show a decrease in imports, South Australia in exports, and in total value of trade Victoria and

South Australia each show a decrease. If the figures for the years 1899 and 1891 be compared for the States comprising the Commonwealth, it will be found that, while there is a diminution of upwards of £2,000,000 in the total value of imports, the exports show an increase amounting to nearly £14,000,000, while the value of the total trade advanced during the period in question from £128,696,039 to £140,570,172, representing an expansion of upwards of £11,800,000.

Intercolonial Trade.

The trade shown in the above series of tables represents, not only the business transacted with countries outside Australasia, but the trade maintained by the colonies with one another. This intercolonial trade, which forms a considerable proportion of the total which has just been dealt with, reached its highest point in 1899 with a total of £63,551,288, but in proportion to population the average is somewhat lower than that for the years 1871 and 1891. The following figures represent the total value of this important branch of the general trade, as well as the value per inhabitant. It is obvious that the total intercolonial trade which is shown by the table represents in reality twice the actual value of goods passing from one colony to another, the same merchandise figuring in one place as exports, and in another as imports. The value of goods passing through a colony on their way to foreign countries, as well as of goods imported from abroad and re-exported, is, of course, also included in the figures. The actual movement is therefore less than half of the values given below :—

Year.	Total.	Value per Inhabitant.
	£	£ s. d.
1861	17,166,925	13 16 0
1871	29,745,068	15 7 6
1881	37,156,289	13 8 4
1891	60,114,797	15 12 11
1899	63,551,288	14 5 6

The figures given in the following table represent the total intercolonial trade of each colony in 1881, 1891, and 1899, and although they are affected by the circumstances just mentioned, they afford

interesting evidence of the way in which the prosperity of one province is bound up with that of the others :—

State.	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	per cent	per cent	per cent
New South Wales..	13,211,372	22,730,348	21,637,669	35·6	37·8	34·0
Victoria	10,686,172	13,575,205	13,590,102	28·8	22·6	21·4
Queensland	4,810,286	6,822,366	10,025,250	12·9	11·3	15·8
South Australia ...	3,089,466	11,034,215	7,586,154	8·3	18·4	11·9
Western Australia.	341,156	822,125	5,249,931	0·9	1·4	8·3
Tasmania	2,027,781	2,411,428	2,417,318	5·5	4·0	3·8
New Zealand..... ..	2,990,056	2,719,110	3,044,864	8·0	4·5	4·8
Australasian Exports & Imports	37,156,289	60,114,797	63,551,288	100·0	100·0	100·0

Extra-Australasian Trade.

If Australasia be regarded as a whole, and an elimination made of the real trade which the provinces carry on with each other, as well as the value of the goods which pass through one colony on their way to another, as shown under the heading of Intercolonial trade, the total and average amounts will, of course, be greatly reduced. Such an elimination has been made in the following table, which shows the growth since 1861 of what may be called the external trade — that is, trade transacted with all countries outside of Australasia :—

Year.	External Trade.	
	Total Value.	Value per head.
	£	£ s. d.
1861	35,061,282	28 3 10
1871	39,729,016	20 10 10
1881	64,554,678	23 6 3
1891	84,651,488	22 0 8
1899	97,696,852	21 18 11

By far the greater part of the external trade of Australasia is carried on with the United Kingdom ; and of the remainder the larger proportion is transacted with foreign countries, principally France, Germany, Belgium, and the United States. The trade with British possessions, which for a few years had considerably declined in value, reached in 1899 a total of nearly £9,600,000, a figure largely in excess of that for any previous year shown in the table. The subjoined table shows the distribution of the external trade between the three divisions named :—

Trade with—		1861.	1871.	1881.	1891.	1899.
		£	£	£	£	£
The United Kingdom	Imports ..	13,467,370	12,006,419	25,662,185	30,823,474	26,758,254
	Exports ..	12,207,228	18,486,703	24,342,422	32,638,841	35,992,255
	Total....	25,674,598	30,493,122	50,004,607	63,462,315	62,750,509
British Possessions..	Imports ..	1,767,391	2,382,148	3,078,195	3,094,417	3,026,269
	Exports ..	3,656,065	764,652	4,257,961	2,231,608	6,572,830
	Total....	5,423,456	3,146,800	7,336,156	5,326,025	9,599,099
Foreign Countries ...	Imports ..	3,216,738	2,245,124	4,603,326	7,490,424	10,239,230
	Exports ..	746,490	3,843,970	2,610,589	8,372,724	15,108,014
	Total....	3,963,228	6,089,094	7,213,915	15,863,148	25,347,244
Total	Imports ..	18,451,499	16,633,691	33,343,706	41,408,315	40,023,753
	Exports ..	16,609,783	23,095,325	31,210,972	43,243,173	57,673,099
	Total....	35,061,282	39,729,016	64,554,678	84,651,488	97,696,852

Prior to the year 1883 the European trade of Australasia was almost exclusively carried on with the United Kingdom, but since that time direct commercial relations have been established with the leading Continental countries. The British trade increased during the ten years ended 1891 by £13,457,708, equal to nearly 27 per cent. ; while the trade with foreign countries increased during the same period by £8,649,233, or nearly 120 per cent. From 1891 to 1899, chiefly due to the cultivation of direct business relations with the Continent of Europe, trade with the United Kingdom decreased by £711,806 ; while the foreign trade increased during the same period by the large sum of £9,484,096. The trade with British possessions was returned in 1899 as £9,599,099, as against £5,326,025 in 1891, and £7,336,156 in 1881. As compared with 1891, the year 1899 shows a decrease in trade with the United

Kingdom of 1·12 per cent., while with British possessions there was an increase of 80·23 per cent., and with foreign countries an increase of 59·79 per cent.

The tables of imports and exports shown below give the direct trade with foreign countries, in accordance with the returns furnished to the various statististical offices. With respect to some countries, however, principally France and Belgium, and in a less degree other European countries, a certain proportion, both of the import and export trade, is carried in British vessels to London, and thence distributed—in some instances at a much later date. It is impossible to expect that the whole of this trade could with absolute exactitude be referred to the country of origin, particularly when it is considered that in all countries of the world consignees of various lines of goods do not always furnish reliable information as to ultimate origin or destination of merchandise. The defects above referred to are not common to the Australasian trade returns alone, but more or less disfigure those of every country.

The following table shows the value of the goods imported direct from each of the principal countries during the years 1881, 1891, and 1899 :—

Imports direct from—	1881.	1891.	1899.
	£	£	£
British Empire—			
United Kingdom	25,662,185	30,823,474	26,758,254
India and Ceylon	842,943	1,258,072	1,584,743
Canadian Dominion	100,478	151,727	213,401
Cape Colony	1,303	382	2,898
Fiji	63,190	332,774	358,582
Mauritius	1,364,421	459,179	94,577
Hongkong	642,308	648,785	320,816
Straits Settlements	59,043	188,571	264,758
Other Possessions	4,509	54,927	186,494
Total	28,740,380	33,917,891	29,784,523
Foreign Countries—			
France and New Caledonia	340,750	369,035	567,651
Germany	225,672	1,773,277	2,244,154
Italy	7,874	58,484	125,784
Belgium	26,713	321,025	374,100
Sweden and Norway	259,156	459,414	383,205
United States	1,593,088	2,920,115	5,239,607
Netherlands and Java	466,444	654,660	143,518
South Sea Islands	124,447	78,285	196,469
China	1,430,993	699,143	306,505
Japan	23,245	61,286	271,297
Other Countries	104,944	95,700	386,940
Total	4,603,326	7,490,424	10,239,230
Total, British and foreign	33,343,706	41,408,315	40,023,753

The external exports for the same periods were as follow :—

Exports direct to—	1881.	1891.	1899.
British Empire—	£	£	£
United Kingdom	24,342,422	32,638,841	35,992,255
India and Ceylon	3,153,835	1,000,871	3,239,815
Canadian Dominion	.....	40	175,030
Cape Colony	314,460	171,412	1,631,303
Fiji	157,913	166,326	208,489
Mauritius	95,475	107,151	29,371
Hongkong	359,934	491,771	445,021
Straits Settlements	38,767	151,243	88,991
Other Possessions	137,577	142,794	754,810
Total	28,600,383	34,870,449	42,565,085
Foreign Countries—			
France and New Caledonia	336,498	1,835,784	3,893,306
Germany	70,422	863,815	2,901,363
Italy	152,914	27,999	305,560
Belgium	100,437	1,485,731	2,247,107
Sweden and Norway	.....	.....	83
United States	1,298,905	3,269,261	3,297,117
Netherlands and Java	52,192	92,645	197,966
South Sea Islands	140,299	149,370	222,193
China	78,599	30,749	324,871
Japan	6,872	16,578	169,418
Other Countries	373,451	600,792	1,549,030
Total	2,610,589	8,372,724	15,108,014
Total, British and foreign	31,210,972	43,243,173	57,673,099

The values of the combined imports and exports were as given below :—

Total direct trade with—	1881.	1891.	1899.
British Empire—	£	£	£
United Kingdom	50,004,607	63,462,315	62,750,509
India and Ceylon	3,996,778	2,258,943	4,824,558
Canadian Dominion	100,478	151,767	388,431
Cape Colony	315,763	171,794	1,634,201
Fiji	221,103	499,100	567,071
Mauritius	1,459,896	566,330	123,948
Hongkong	1,002,242	1,140,556	765,837
Straits Settlements	97,810	339,814	353,749
Other Possessions	142,086	197,721	941,304
Total British	57,340,763	68,788,340	72,349,608
Foreign Countries—			
France and New Caledonia	677,248	2,204,819	4,460,957
Germany	296,094	2,637,092	5,145,517
Italy	160,788	86,483	431,344
Belgium	127,150	1,806,756	2,621,207
Sweden and Norway	259,156	459,414	383,288
United States	2,891,993	6,189,376	8,536,724
Netherlands and Java	518,636	747,305	341,484
South Sea Islands	264,746	227,655	418,662
China	1,509,592	729,892	631,376
Japan	30,117	77,864	440,715
Other Countries	478,395	696,492	1,935,970
Total Foreign	7,213,915	15,863,148	25,347,244
Total British and Foreign	64,554,678	84,651,488	97,696,852

Trade with the United Kingdom.

In order to make a useful comparison of the value of the Australasian trade to the United Kingdom, it is necessary to use the British Board of Trade returns, and these returns have been used in the ensuing comparisons. The figures relating to Australasia, especially for late years, approximate very closely to the local Customs statistics. From the table it will be observed that while in 1881 the produce of these colonies formed 29·5 per cent. of the imports of the United Kingdom from her possessions, in 1891 the proportion was 31·4 per cent., and in 1899 rather less, viz., 31·2 per cent :—

Year.	As returned by British Customs.		Proportion of Imports from Australasia to total from British Possessions.
	Total Imports from British Possessions.	Imports from Australasia.	
	£	£	per cent.
1881	91,539,660	26,975,381	29·5
1891	99,464,718	31,261,566	31·4
1899	106,829,295	33,321,762	31·2

Although it is very little more than a century since the commencement of Australasian settlement, an examination of the trade statistics of the mother country with her numerous dependencies shows that the trade of these colonies with the United Kingdom is now only exceeded by that of India, while it is nearly double that of Canada, and in a larger degree exceeds the trade of any other British possession. The following table, which is also compiled from the returns of the Board of Trade, shows the total trade of the United Kingdom, exclusive of specie, for the three years 1881, 1891, and 1899, with the most important of Great Britain's colonies and possessions :—

Country.	1881.	1891.	1899.	Proportion of Trade of United Kingdom with British possessions.		
				1881.	1891.	1899.
	£	£	£	per cent	per cent	per cent
India	63,682,398	64,783,605	59,708,314	35·7	33·6	29·7
British North America	20,608,159	20,906,357	29,500,358	11·6	10·8	14·7
Cape Colony and Natal	13,105,264	14,892,965	22,401,593	7·4	7·7	11·2
Straits Settlements	6,527,675	7,946,127	8,527,746	3·7	4·1	4·2
Hongkong	4,815,905	3,833,859	3,745,471	2·7	2·0	1·8
Australasia	50,957,785	59,493,319	58,061,693	28·6	30·9	28·9

If, again, a comparison be made of the total trade transacted by the United Kingdom with all countries during the year 1899, it will be found that the trade with Australasia, amounting to £58,061,693 as shown above, was only exceeded by that carried on with four countries, namely, the United States, with a total of £155,056,660; France, with £75,277,800; Germany, with £68,101,315; and British India, with £59,708,314. The amounts taken by other countries will be found below, and it must be noted that the values given do not include specie:—

Country.	1881.	1891.	1899.	Proportion to Total Trade of United Kingdom.		
				1881.	1891.	1899.
	£	£	£	per cent	per cent	per cent
France	70,069,848	69,114,136	75,277,800	10·1	9·3	9·2
Germany	52,927,199	56,976,104	68,101,315	7·6	7·7	8·4
Belgium	25,047,333	30,525,737	37,448,516	3·6	4·1	4·6
Holland	38,295,414	42,290,587	44,517,957	5·5	5·7	5·5
Spain	14,421,326	16,050,936	20,192,186	2·1	2·2	2·5
Italy	10,792,615	10,272,329	11,363,080	1·6	1·2	1·4
United States	139,990,876	145,475,197	155,056,660	20·2	19·5	19·0
Argentine Republic	4,000,090	7,817,256	17,459,916	0·6	1·0	2·1
Chili	5,417,363	5,916,225	6,665,088	0·8	0·8	0·8
Brazil	13,254,733	12,855,202	9,592,792	1·9	1·7	1·2
Uruguay	1,881,522	1,568,891	1,606,999	0·3	0·2	0·2
Australasia	50,957,785	59,493,319	58,061,693	7·3	8·0	7·1

Trade with Foreign Countries.

Every year steamers of greater tonnage and higher speed are visiting the colonies from Europe, and a considerable expansion of commerce must of necessity take place, owing to the new outlets for trade which have been opened up thereby. The value of Australasian imports from the principal foreign countries may be traced below from the year 1861:—

Country.	1861.	1871.	1881.	1891.	1899.
	£	£	£	£	£
Belgium	.....	.....	26,713	321,025	374,100
France and New Caledonia	136,124	158,992	340,750	369,035	567,651
Germany	109,172	3,899	225,672	1,773,277	2,244,154
Netherlands and Java	114,304	194,519	466,444	654,660	143,518
Italy	.....	.....	7,874	58,484	125,784
Sweden and Norway	22,666	106,720	259,156	459,414	383,205
China	827,347	874,925	1,430,993	699,143	306,505
Japan	.....	.....	23,245	61,286	271,297
South Sea Islands	40,200	135,060	124,447	78,235	196,469
United States	1,080,673	616,625	1,593,088	2,920,115	5,239,607
Other Countries	886,252	154,384	104,944	95,700	386,940
Total	3,216,738	2,245,124	4,603,326	7,490,424	10,239,230

The exports from Australasia to the countries mentioned in the preceding table are appended :—

Country.	1861.	1871.	1881.	1891.	1899.
	£	£	£	£	£
Belgium	.....	.....	100,437	1,485,731	2,247,107
France and New Caledonia	26,793	101,758	336,498	1,835,784	3,893,306
Germany	.....	.....	70,422	863,815	2,901,363
Netherlands and Java	3,907	39,517	52,192	92,645	197,966
Italy	.....	.....	152,914	27,999	305,560
Sweden and Norway	.....	.....	.....	.....	83
China	114,149	29,137	78,599	30,749	324,871
Japan	1,805	9,470	6,872	16,578	169,418
South Sea Islands	36,130	153,568	140,299	149,370	222,193
United States	76,154	367,361	1,298,905	3,269,261	3,297,117
Other Countries	487,552	3,143,159	373,451	600,792	1,549,030
Total	746,490	3,843,970	2,610,589	8,372,724	15,108,014

The commerce with foreign countries from the commencement of the period under review exhibits very satisfactory progress; the imports have increased 218·31 per cent., while the exports have grown to over twenty times their original value, the increase in the total trade being 539·56 per cent. This expansion is chiefly due to the development of the European continental trade, consequent on the diversion of part of the wool business from London, which was largely brought about by the display of local resources at the Sydney and Melbourne International Exhibitions of 1879 and 1880. The annual increase per cent. of the trade of the Australasian colonies with the four principal foreign countries with which they have commercial relations is shown below, the period covered being the nineteen years extending from 1881 to 1899 :—

Country.	Imports.	Exports.	Total Trade.
	per cent.	per cent.	per cent.
Belgium	14·90	17·77	17·26
France and New Caledonia	2·72	13·75	10·43
Germany	12·85	21·62	16·22
United States	6·47	4·90	5·86

The trade with Belgium exhibits the greatest progress, but Antwerp, the port from which a great portion of German and French manufactures is shipped, is also the distributing centre for a considerable part of the wool destined for the Continent, and large quantities of this product landed there ultimately find their way to Germany, France, and other countries. The French, early in 1883, were the first to establish direct commercial relations with these colonies, the steamers of the Messageries Maritimes, a subsidised line, making their appearance for the first time in Australian waters in the year named. In 1887 the vessels of the Norddeutscher Lloyd Company, of Bremen, commenced trading with Australasia; and in the latter part of 1888 a line of German cargo-boats opened up further

communication between the great wool-exporting cities of Sydney, Melbourne, and Adelaide and the ports of Antwerp, Hamburg, and Dunkirk. Belgium has also established a line of steamships; and the latest foreign testimony to the growing importance of Australasia is the regular running of the Nippon Yusen Kaisha's steamers between Japanese ports and Sydney. In addition to the companies mentioned, some British lines run their vessels direct to Continental ports.

The result of these efforts to establish commercial relations is evident from the increase of trade which the foregoing table discloses, and from the diversion, now rapidly being effected, in the channel by which the wool required for Europe reaches the market. The example of the South American Republics, the bulk of whose produce now finds a market at the ports of Antwerp, Hamburg, Havre, and Dunkirk without passing through London, was not lost on Continental buyers. It was manifest that direct shipments of wool to Europe could as readily be made from Sydney or Melbourne as from Buenos Ayres or Monte Video; hence the presence in the local markets, in increasing numbers, of buyers representing Continental firms.

Australasia has for many years maintained important commercial relations with the United States of America, and in 1899 America's share of the trade of Australasia with foreign countries was about 34 per cent. The greater part of this trade was carried on with the colonies of New South Wales, Victoria, and New Zealand. The main exports to the United States are specie, wool, coal, kauri gum, and New Zealand flax—chiefly the two first mentioned; so that, though large in its nominal amount, the trade is less valuable than would at first sight appear. The export of wool, which had formerly been unimportant, amounted in 1891 to £514,551, an increase of £325,314 over the total of the previous year; but this high value has not been maintained, and owing to tariff changes in the United States there was a fall to £228,040 in 1894, followed by a rise to £441,049 in 1896, while the figures for 1899 stood at £319,128.

Under present conditions no extension of commercial relations with the United States can be looked forward to; but trade with the East gives good promise for the future, especially with India, China, Japan, and the East Indian Archipelago, where markets for Australasian wool will possibly in time be found—little in that direction having been accomplished up to the present time. As mentioned above, Japan has established a national line of steamers to foster the trade between that country and Australasia; and with the abolition of the duty on wool, and the benefits to be derived from wearing woollen clothing impressed upon the people, there ought to be a good opening in that country for the staple product of these colonies. The foundation of such a trade has already been laid down, the exports of wool from New South Wales ports to Japan in 1899 being valued at about £78,000. A large amount of business is already transacted with India and Ceylon, and this trade bids fair to increase, particularly in the tea of those places, which now

strongly competes with the Chinese leaf in public estimation. The value of the direct import of Indian teas increased from £280,780 in 1890 to £734,941 in 1899; while the imports of this article from China decreased from £788,943 in 1890 to £231,635 in 1899.

The Australasian exports to China are but small compared with the imports, and evince a considerable falling-off since 1861. For 1899 the total was recorded as £320,816, but included in this amount was an unusually large export of silver bullion from South Australia valued at £304,000. The Customs returns, however, do not represent the whole amount of the trade with China, as a considerable portion of the commerce with Hongkong is in reality transacted with the Chinese Empire, Hongkong being to a large extent a distributing centre for the Empire. In view of this fact, the following table, showing the trade with the Chinese Empire and Hongkong, has been compiled :—

Country.	Imports.			Exports.		
	1890.	1891.	1899.	1890.	1891.	1899.
	£	£	£	£	£	£
Chinese Empire	706,131	699,143	306,505	56,269	30,749	320,816
Hongkong	753,853	648,785	324,871	451,456	491,771	445,021
Total	1,459,984	1,347,928	631,376	507,725	522,520	765,837

Trade with the South Pacific Islands, which on the whole may be said to be increasing, consists mostly of the importation of raw articles in exchange for Australasian produce. The bulk of the trade is done with Fiji and New Caledonia, the French colony dealing principally with New South Wales, as Sydney is the terminal port for the mail-steamers of the Messageries line. But owing to the enforcement of the new French Customs tariff, which is highly protective in its character in the colonies of that country as well as in France itself, the New Caledonian trade bids fair to be lost to Sydney; for while the exports from New South Wales to New Caledonia in 1892 amounted to £184,128, they had fallen in 1899 to £149,722, or by more than 18 per cent. The trade with New Guinea is at present but small, though when the resources of that prolific island come to be developed a large increase may be expected. Besides the countries mentioned, Australasia maintains a not inconsiderable trade with Java and Scandinavia, but it consists mainly of imports.

The figures relating to the trade of each colony with countries outside Australasia would be extremely interesting if they could be given with exactness. Unfortunately this is impossible, as the destination of goods

exported overland cannot be traced beyond the colony to which they are in the first instance despatched—all that can be given is the trade by sea, which the following series of tables shows. The imports from countries outside Australasia for the states comprising the Commonwealth, together with the total for the seven colonies, were as follow :—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	11,357,096	14,256,219	13,480,913	14 18 9	12 9 4	10 0 5
Victoria	10,768,791	13,045,493	9,546,064	12 7 6	11 7 9	8 4 4
Queensland	1,492,395	3,183,209	3,766,214	6 14 3	7 18 6	7 17 11
South Australia	3,566,917	4,038,763	3,116,200	12 17 7	12 10 1	8 9 5
Western Australia	208,743	695,358	2,161,175	7 1 5	13 12 11	12 14 10
Tasmania	445,576	698,973	550,382	3 16 3	4 13 10	3 1 3
Commonwealth.....	27,839,428	35,918,015	32,620,948	12 3 9	11 4 1	8 16 3
New Zealand.....	5,504,278	5,490,300	7,402,805	11 3 4	8 14 4	9 17 5
Australasia	33,343,706	41,408,315	40,023,753	12 0 10	10 15 7	8 19 10

The exports to countries outside Australasia were as follow :—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	9,326,349	14,340,850	18,921,199	12 5 4	12 10 10	14 1 4
Victoria	11,515,661	11,097,653	13,384,508	13 4 8	9 13 9	11 10 5
Queensland	1,301,400	3,378,816	4,915,491	5 17 1	8 8 3	10 6 2
South Australia	3,172,920	5,620,561	4,794,435	11 9 2	17 8 0	13 0 7
Western Australia	357,702	562,076	4,048,068	12 2 4	11 0 7	23 17 5
Tasmania	513,363	382,381	1,379,099	4 7 10	2 11 4	7 13 5
Commonwealth.....	26,187,395	35,382,337	47,442,800	11 9 3	11 0 9	12 16 4
New Zealand.....	5,023,577	7,860,836	10,230,299	10 3 10	12 9 7	13 12 10
Australasia	31,210,972	43,243,173	57,673,099	11 5 5	11 5 1	12 19 1

The total extra-Australasian trade was therefore as follows:—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	20,683,445	28,597,069	32,402,112	27 4 1	25 0 2	24 1 9
Victoria	22,284,452	24,143,146	22,930,572	25 12 2	21 1 6	19 14 9
Queensland	2,793,705	6,562,025	8,681,705	12 11 4	16 6 9	18 4 1
South Australia	6,739,837	9,659,324	7,910,635	24 6 9	29 18 1	21 10 0
Western Australia	566,445	1,257,434	6,209,243	19 3 9	24 13 6	36 12 3
Tasmania	958,939	1,081,354	1,929,481	8 4 1	7 5 2	10 14 8
Commonwealth	54,026,823	71,300,352	80,063,748	23 13 0	22 4 10	21 12 7
New Zealand	10,527,855	13,351,136	17,633,104	21 7 2	21 3 11	23 10 3
Australasia	64,554,678	84,651,488	97,696,852	23 6 3	22 0 8	21 18 11

It will be seen that the growth of the import and export trade of the various colonies has not been uniform. The imports of New South Wales in 1891 exceeded those in 1881 by nearly 3 millions sterling, while in 1899 they were only about £2,124,000 in excess of the returns for 1881. The exports of 1891 exceeded those of 1881 by over 5 millions, but from 1891 to 1899 they increased by about £4,580,000. The Victorian imports increased from 1881 to 1891 in about the same ratio, but in 1899 they were over a million less than in 1881; while the exports, which in 1891 had decreased by £418,000, showed an increase in 1899 of upwards of £1,869,000 on the figures for 1881. The Tasmanian import trade in 1899 shows an increase of about £105,000 on that of 1881, while the exports in 1899 exhibit an increase of 169 per cent. as compared with those of 1881, and of over 260 per cent. on those of 1891. The South Australian imports were £451,000 less in 1899 than they were in 1881; while the exports, which in 1891 nearly doubled those of 1881, shrunk by about £826,000 during the next eight years. The value of the New Zealand imports in 1899 was about £1,899,000 more than in 1881, but the exports increased during the period by over 100 per cent. The Queensland imports more than doubled from 1881 to 1891, and from the latter year they had increased by about £583,000 in 1899; the exports, however, increased steadily, and in 1899 were over 277 per cent. larger than in 1881. The imports of Western Australia increased from 1881 to 1891 more than threefold, and from 1891 to 1899 by over 210 per cent., while the exports increased over sevenfold from 1891 to 1899, about half the Western Australian gold being exported by way of the other colonies. No rigid deductions, however, can be drawn from the facts just given; for, as is well known, some of the provinces—notably Queensland and Tasmania—are not yet in a position to maintain a direct foreign trade, and in a forced comparison with the rest of Australasia are apt to suffer.

If the total trade of 1899 be considered, New South Wales heads the list with a commerce valued at £32,402,112; Victoria, with £22,930,572, being second; while New Zealand ranks third, with a

trade of £17,633,104. Taking all the colonies together, the external imports and exports combined equal a trade of £21 18s. 11d. per inhabitant—a falling-off of 1s. 9d. as compared with 1891, and of £1 7s. 4d. as compared with 1881. It is interesting to compare the volume of the external trade of Australasia with the latest returns of other countries.

Country.	Total Trade.			Per Inhabitant.
	Merchandise.	Specie and Bullion.	Total.	
	£	£	£	£ s. d.
United Kingdom	764,392,571	110,614,460	875,007,031	21 15 5
France	410,244,000	46,772,000	457,016,000	11 18 10
Germany	472,160,000	30,650,000	502,810,000	9 5 2
Italy	114,907,000	922,000	115,829,000	3 13 2
Belgium	251,957,000	20,657,000	272,614,000	40 17 6
Spain	65,696,000	3,700,000	69,396,000	3 9 0
Cape Colony	41,044,767	956,372	42,001,139	21 12 9
Canada	64,390,957	1,794,477	66,185,434	12 15 3
United States	384,903,000	46,215,000	431,118,000	5 18 5
Australasia	85,001,229	12,695,623	97,696,852	21 18 11

The trade of Australasia per head of population exceeds that of any country appearing in the list with the exception of Belgium.

An excess in the value of imports over exports was for many years a prominent feature of the trade of Australasia taken as a whole, although in some colonies the reverse was the case. The surplus of imports was due to two causes: (1) the importation, by the Governments and local bodies of the various colonies, of money to cover the cost of construction of public works; and (2) the private capital sent to Australasia for investment. Taking the colonies as a whole, these two items combined exceeded the payments made for interest on past loans, both public and private, and the sums drawn from the country by absentees; but as nearly all the colonies have ceased to borrow, or the amount of their borrowing has fallen below their yearly payments for interest, the whole of Australasia now shows an excess of exports, and the same fact is also exhibited in the trade returns for 1899 for all the colonies. The present excess of exports and its cause come more properly within the parts of this work dealing with Public and Private Finance, and are dealt with at some length there.

Exports of Domestic Produce.

The values of the exports of Australasia and of its various provinces have been given in the previous pages without respect to the countries where the articles were produced. It is important to find to what extent the exports have been the produce of each of the colonies whence they were shipped. The following table shows the value of the exports

of domestic produce of each colony as returned by the Customs for the years 1881, 1891, and 1899, and the value thereof per inhabitant :—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	10,784,327	21,085,712	19,221,854	14 1 11	18 8 9	14 5 9
Victoria	12,480,567	13,026,426	14,038,600	14 6 10	11 7 6	12 1 8
Queensland	3,478,376	7,979,080	11,697,139	15 12 11	19 17 4	24 10 6
South Australia	3,755,781	4,810,512	4,084,732	13 11 3	14 17 10	11 2 0
Western Australia	498,634	788,873	6,793,946	16 17 10	15 9 7	40 1 3
Tasmania	1,548,116	1,367,927	2,557,315	13 5 0	9 3 8	14 4 7
Commonwealth	32,545,801	49,058,530	58,393,586	14 4 11	15 16 1	15 15 6
New Zealand	5,762,250	9,400,094	11,799,740	11 13 9	14 18 6	15 14 8
Australasia	38,308,051	58,458,624	70,193,326	13 15 11	15 4 4	15 15 5

These figures, however, must be regarded as merely approximate, for it is difficult to ascertain with exactitude the domestic exports of some of the colonies, chiefly New South Wales, South Australia, and Victoria. In the last-mentioned colony, a large proportion of the domestic export of wool consisted, in former years, of New South Wales produce, but the amount so stated is now comparatively small. There is also an export by South Australia, as local produce, of wool grown in New South Wales, but the value thereof is by no means large. Wool, chiefly from Queensland, has in some years been exported as domestic produce by New South Wales, but in 1899 no such overstatement took place. Also, as regards New South Wales, tin and copper ore, the former chiefly from Queensland and Tasmania and the latter from South Australia, which are imported for the purpose of being refined, are exported as domestic produce. An attempt has been made to remove these elements of error from the returns as they are presented by the Customs, and the amounts shown in the following table may be accepted as the true values of domestic produce exported by each colony during 1899 :—

State.	Domestic Exports.		
	Total Value.	Proportion to Total.	Value per Inhabitant.
	£	per cent.	£ s. d.
New South Wales	19,216,822	27·5	14 5 8
Victoria	13,790,214	19·7	11 17 5
Queensland	11,697,139	16·7	24 10 6
South Australia	4,069,501	5·8	11 1 3
Western Australia	6,793,946	9·7	40 1 3
Tasmania	2,557,315	3·7	14 4 7
New Zealand	11,799,740	16·9	15 14 8
Australasia	69,924,677	100·0	15 14 2

As the table shows, the largest values per inhabitant were returned by Western Australia and Queensland, with £40 1s. 3d. and £24 10s. 6d. respectively per head of population. The growth of the domestic exports of Western Australia has been extremely rapid, the total value rising from £1,273,638 at the end of 1895 to £6,793,946 for the year 1899, an increase of over 433 per cent. Of course, this great expansion is in the main due to the export of gold, the value of the total export of the precious metal being returned at £5,451,368 in 1899 as against £879,748 in 1895. With regard to Queensland, a great increase has taken place in the exports of such articles as gold, pearl shell, sugar, and various pastoral products. Tasmania also shows a large increase both in actual and comparative value of domestic export trade, the returns for 1899 showing a total value of £2,557,315, with £14 4s. 7d. per head of population, as against £1,473,283 and £9 0s. 3d. in 1896. The phenomenal mineral export of 1899, when the gross total reached the sum of £1,465,000, is chiefly accountable for this expansion, and, so far as can be seen, there is every prospect of this expansion being sustained.

Placing the values of the external exports of domestic production of Australasia side by side with those of some of the more important countries of the world, a useful comparison is afforded, and from whatever standpoint the matter be viewed these colonies appear in a very favourable light. The following table shows the value of the domestic exports, exclusive of coin and bullion, of some of the principal countries of the world, the figures referring to the year 1898. The figures for Australasia only represent the external exports of domestic produce; in the preceding table the values include the domestic produce of each colony consumed in the other provinces :—

Country.	Exports of Domestic Produce (exclusive of Coin and Bullion).	Value per Inhabitant.
	£	£ s. d.
United Kingdom	233,359,240	5 16 1
France	140,436,000	3 13 5
Germany	187,830,000	3 9 2
Austria-Hungary	67,302,000	1 10 4
Italy	48,143,000	1 10 5
Belgium	71,480,000	10 16 3
Canada	34,198,500	6 11 10
Argentine Republic	26,766,000	5 17 0
United States	252,144,000	3 9 3
Australasia	37,080,958	8 6 7

The extent to which the geographical position of a colony enables it to benefit by the production of its neighbours is illustrated by the proportion which the non-domestic bear to the total exports. The following table shows the value of the re-export trade and the proportion

which it bears to the total export trade of each colony in 1899; and it would appear that South Australia, New South Wales, and Victoria, in the order named, benefit largely by their position, the re-export trade of the other colonies being insignificant:—

State.	Re-exports.	Proportion to Total Exports.
	£	per cent.
New South Wales	9,223,612	32·4
Victoria	4,529,180	24·4
Queensland	245,719	2·0
South Australia	4,424,773	52·0
Western Australia	191,696	2·7
Tasmania	20,160	0·8
Commonwealth	18,635,140	24·2
New Zealand	138,595	1·2
Australasia	18,773,735	21·1

Three-fifths of this re-export trade is external, the amount being £9,189,117, as compared with £6,358,660 of intercolonial trade.

The Wool Trade.

The rapid growth of the Continental wool trade during the periods from 1881 to 1891, and from 1891 to 1899, is illustrated by the following table, which shows the value of the staple exported direct to the principal countries, and the proportion of the total amount taken by each:—

Country.	Value.			Proportion.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	per cent	per cent	per cent
United Kingdom	15,777,327	19,891,218	15,245,201	97·8	82·7	65·5
Belgium	96,557	1,453,755	2,018,285	0·6	6·0	8·6
Germany	53,809	782,676	2,020,537	0·3	3·3	8·7
France	26,965	1,386,768	3,295,239	0·2	5·8	14·2
United States	132,699	514,551	319,128	0·8	2·1	1·4
Other Countries	48,725	34,259	361,210	0·3	0·1	1·6
Total	16,136,082	24,063,227	23,259,600	100·0	100·0	100·0

As the table shows, there has been an increase of considerably over seven millions sterling in the value of wool shipped from Australasia since 1881. Since 1891, however, there has been a decline in value to

the extent of over £800,000. This decline is accounted for by the fact that during the last few years the total number of sheep has decreased enormously, owing to severe and protracted droughts. In 1891, the sheep depastured in the colonies numbered 124,548,000, but at the end of 1899, the total had fallen to 93,645,000; a decrease of nearly 31 millions. It will be observed that the wool exported to the United Kingdom has decreased in value to the extent of £523,000, or from 97·8 to 65·5 per cent., while the export to foreign countries, with one exception, has increased both absolutely and relatively.

It is necessary to point out here that all the figures in the present chapter dealing with the export of wool are based on the Customs returns of the different colonies, and represent the values placed on the wool by the exporters. The figures relating to the value of the wool clip which are given in the chapter on the pastoral industry are less than those just given, the difference being made up of the cost of carriage and other charges from the sheep-runs to the ship's side.

The following table shows the total and proportionate value of the wool shipped direct to countries outside Australasia by each colony :—

State.	Value.			Proportion.		
	1881.	1891.	1899.	1881.	1891.	1899.
	£	£	£	per cent	per cent	per cent
New South Wales..	4,485,295	7,917,587	9,426,419	27·8	32·9	40·5
Victoria..	5,327,934	7,070,661	5,613,922	33·0	29·4	24·1
Queensland	996,047	2,438,321	1,669,768	6·2	10·1	7·2
South Australia ...	1,747,696	1,888,107	1,610,145	10·8	7·8	6·9
Western Australia.	256,689	311,925	415,926	1·6	1·3	1·8
Tasmania	416,572	313,422	224,253	2·6	1·3	1·0
New Zealand	2,905,849	4,123,204	4,299,167	18·0	17·2	18·5
Australasia ...	16,136,082	24,063,227	23,259,600	100·0	100·0	100·0

It will be seen from the table just given that Victoria was credited in 1881 with exporting wool to a considerable value in excess of that of New South Wales. In 1891 and 1899, however, the positions were reversed. In 1881 the wool produced in other colonies, chiefly New South Wales, but credited to Victoria, was valued at £2,780,600; in 1891, £2,767,000; but in 1899, a careful discrimination was made by the Victorian Customs Department between wool of actual Victorian production and that produced by the other colonies. The wool imported from other colonies and credited to New South Wales for the year 1891 was £109,000, while for 1899 there was no such over-statement. South Australia also receives a large quantity of New South Wales wool for shipment, though not nearly to so great an extent as Victoria.

In connection with this subject, a statement of the value of wool of its own production which each colony exports direct and by way

of the other colonies may not be without interest. The figures, which are given below, relate to the year 1899 :—

State.	Domestic Wool Exported.			Proportion of Export of Australasia.
	Direct.	By way of the other colonies.	Total.	
	£	£	£	per cent.
New South Wales	7,930,132	2,219,431	10,149,563	43·2
Victoria	3,288,301	62,050	3,350,351	14·3
Queensland	1,663,094	1,716,085	3,379,179	14·4
South Australia	1,312,132	192,769	1,504,901	6·4
Western Australia	415,926	7,370	423,296	1·8
Tasmania	224,253	132,812	357,065	1·5
New Zealand	4,299,167	25,004	4,324,171	18·4
Australasia	19,133,005	4,355,521	23,488,526	100·0

In the table given on the preceding page the value of the direct export of wool is quoted at £23,259,600. The apparent discrepancy, however, is of no moment when it is remembered that about one-fifth of the clip of Australasia is subject to valuation first at the border of the colony in which it is produced, and again at the port from which it is finally shipped to Europe or America. In the amount of £23,488,526 shown above is, besides, included the value of such wool as was exported during 1899 to one of the adjacent colonies, and there held over for the sales in January of the following year.

The following figures serve to illustrate the development of the local wool sales in those colonies where such sales are held, viz., in New South Wales, Victoria, Queensland, South Australia, and New Zealand, for the ten seasons from 1890–91 to 1899–1900. The seasons are taken as extending from the 1st July to the 30th June. The number of bales sold during each period shown was as follows:—

Season.	New South Wales.	Victoria.	Queensland.	South Australia.	New Zealand.	Total.
	bales.	bales.	bales.	bales.	bales.	bales.
1890–91	232,856	247,508	.....	43,799	57,166	581,329
1891–92	284,708	292,694	.....	58,011	62,456	697,869
1892–93	362,688	310,828	.....	54,285	85,505	813,306
1893–94	401,185	305,700	.....	65,000	82,547	854,432
1894–95	425,135	328,142	.....	64,056	82,547	899,880
1895–96	415,538	315,543	.....	80,234	82,965	894,280
1896–97	401,048	310,835	.....	63,804	82,515	858,202
1897–98	444,808	286,625	.....	51,287	100,514	883,234
1898–99	447,517	278,482	10,925	60,531	90,806	888,261
1899–1900	399,893	312,571	27,015	70,717	108,846	919,042

The importance of the pastoral industry to Australasia will be made clear in another part of this volume. Its value to each colony varies considerably, as the statement hereunder shows. In no colony, however, Western Australia and Tasmania excepted, does the proportion of exports of this class fall below 30 per cent. of the total value of domestic produce exported. In the case of New South Wales it reaches about 66 per cent., while in New Zealand it is 59 per cent., and in Queensland 58 per cent. :—

State.	Wool.	Other Pastoral Produce.	Total.	Proportion of Exports of Pastoral Produce to Total Exports of Domestic Products.
	£	£	£	per cent.
New South Wales	10,149,563	2,606,733	12,756,296	66·4
Victoria.....	3,350,351	1,214,517	4,564,868	32·5
Queensland	3,379,179	3,421,456	6,800,635	58·2
South Australia	1,504,901	512,912	2,017,813	49·5
Western Australia	423,296	94,087	517,383	7·6
Tasmania	357,065	126,086	483,151	18·9
New Zealand	4,324,171	2,660,796	6,984,967	59·2
Australasia— All Domestic	23,488,526	10,636,587	34,125,113	48·8
External Domestic.	19,133,005	6,966,652	26,099,657	76·5

It will be observed that the figures given in this table are not those furnished by the various Customs Departments; they have been corrected in the manner already explained in order to allow for the incorrect information furnished by shippers in regard to the colony of origin.

Movements of Gold.

Since the discovery of gold in the year 1851 large quantities of the metal—in the form of coin as well as of bullion—have been exported from the Australasian colonies every year. In the figures given below, showing the excess of exports of gold of each colony, no attempt has been made to exclude the intercolonial trade. The largest exporters, it will be found, are also the largest producers, namely, Victoria, New Zealand, and Queensland. The other colonies, except Western Australia, now produce very little more than what suffices to meet their requirements. The returns of the gold imports and exports for New South Wales are swollen by large quantities of Queensland gold sent to Sydney

to be minted and then exported in the shape of coin, but only the excess of exports appears in the following table :—

State.	1851-60.	1861-70.	1871-80.	1881-90.	1891-99.	1851-99.
	£	£	£	£	£	£
New South Wales	8,337,067	13,656,650	5,248,994	277,509	6,016,499	33,536,719
Victoria	86,342,134	62,609,042	37,222,632	23,106,371	19,240,042	228,520,221
Queensland	.....	1,768,575	9,430,137	11,540,245	19,503,180	42,242,137
South Australia	1,900,955	*395,633	*1,100,309	*673,548	1,070,758	802,223
Western Australia	.....	19,586	*38,000	*44,320	13,717,100	13,654,366
Tasmania	843,029	*34,255	165,040	872,754	1,420,714	3,267,282
New Zealand.....	48,981	20,294,822	14,215,143	7,637,381	8,341,159	50,537,486
Total Excess of Exports ..	97,472,166	97,918,787	65,143,637	42,716,392	69,309,452	372,560,434
Average per annum	9,747,217	9,791,879	6,514,364	4,271,639	7,701,050	7,603,274

* Excess of Imports.

Customs Revenue.

The net revenue derived from the taxation of goods imported into Australasia during 1899 amounted to £8,580,784, which is equal to £1 18s. 7d. per inhabitant. It will be found, from a consideration of a subsequent table, that the rate per inhabitant varies very greatly, not only in a comparison of the various colonies, but for the same colony in different years. This variation arises from diverse causes. First, the influence of good or bad times on the purchasing power of the people is directly felt in the Customs collections, although the rise or fall of the rate per inhabitant is not always a safe indication of such influence. Certain colonies, notably Queensland and Western Australia, still grow insufficient agricultural produce for their own requirements, and a good season, since it enables these colonies to depend to a greater extent on their own resources, means a decrease in the revenue derived from the importation of agricultural produce. Similar effects have also been felt in regard to the revenue derived from live stock and other forms of produce. Then it must also be remembered that for many years the colonies have been systematic borrowers in the London market, and they have also been the recipients of much money sent for investment by private persons. As loans of all descriptions reach the borrowing country in the form of goods, and a considerable proportion of the importations is the subject of taxation, years of lavish borrowing are naturally years of large revenue collections, and coincident with the cessation of the flow of foreign capital there is a decrease in Customs revenue. Furthermore, there have been extensive alterations in the tariffs affecting the revenue during the years which the following tables cover. In New South Wales in 1891 and 1895, and in Western Australia in 1893 and 1896, radical tariff changes were made, and in other years minor alterations took

place in nearly all the other colonies. To these changes is chiefly attributable any sharp rise or fall in the rate of revenue per inhabitant. At the same time, it must be allowed that tariff changes have been made which have affected the collections to a very slight extent.

Speaking generally, it may be said that the Customs revenue is declining, and is likely to decline. Apart from the specific causes mentioned above, other effective if less obtrusive influences are at work. Year by year the industries of the colonies are being developed, and the local producer is acquiring a firm hold upon the domestic markets. In several of the provinces little if any revenue is now received from duties on agricultural produce, as such produce is not imported; and many descriptions of manufactured goods have likewise ceased to be introduced, the locally-made article being produced in sufficient quantities to meet the demand. There can be no reasonable doubt that this tendency will be still more marked in the future, and it is, therefore, not surprising that Australasian Treasurers have of late years found it necessary to look to other sources than the Customs for the revenue necessary to carry on the business of the country.

So far as the duties payable may be taken as a basis of classification, the imports may be divided into two classes—one comprising intoxicants and narcotics, upon which duties equal to an average of about 137 per cent. *ad valorem* are levied, and the other consisting of imports selected for taxation at specific or *ad valorem* rates. The value of intoxicants and narcotics imported by the colonies during 1899 for home consumption was £2,871,664, while the duties collected thereon were not less than £3,929,243, the amounts credited to each colony being as follow :—

State.	Imports of Intoxicants and Narcotics for home consumption.	Amount of Import Duties collected.	Proportion to Total Import Duties.
	£	£	
New South Wales ...	948,647	1,087,774	81·5
Victoria	522,572	715,923	37·6
Queensland	423,020	585,953	40·7
South Australia	138,609	195,923	32·5
Western Australia ...	300,413	393,244	47·2
Tasmania	89,134	139,385	32·8
Commonwealth ...	2,422,395	3,118,202	47·7
New Zealand	449,269	811,041	39·6
Australasia	2,871,664	3,929,243	45·8

These collections represent about 45·8 per cent. of the total Customs revenue raised, the remaining portion being distributed among the various colonies as shown below. The total value of imports for home consumption—exclusive, of course, of the value of intoxicants, narcotics,

coin, and bullion—is also given. A column has been added representing the collections as an average *ad valorem* duty on the total imports for home consumption :—

State.	Imports for home consumption (exclusive of Coin and Bullion, and Intoxicants and Narcotics).	Amount of Import Duties collected (less duty paid on Intoxicants and Narcotics).	Average *ad valorem* Duty
	£	£	℔ cent.
New South Wales ...	15,366,324	247,420	1·61
Victoria	10,068,273	1,188,182	11·80
Queensland	5,967,873	848,317	14·21
South Australia	2,409,291	407,192	16·90
Western Australia ...	3,981,423	439,914	11·05
Tasmania	1,630,995	285,105	17·48
Commonwealth...	39,424,179	3,416,130	8·66
New Zealand	8,040,770	1,235,411	15·36
Australasia	47,464,949	4,651,541	9·80

The comparison afforded by the last column, however, has no special value, seeing that a large proportion of the importations other than intoxicants and narcotics, about 59 per cent. for the colonies as a whole, is admitted free of duty, all the colonies except Tasmania having an extensive free list. Reckoning only goods subject to duty, the average rate of duties levied in Australasia is equal to rather more than 20 per cent. *ad valorem*. The actual *ad valorem* duty payable on dutiable goods other than intoxicants and narcotics imported into each colony during 1899, and the proportion of such goods to the imports for home consumption, exclusive of intoxicants and narcotics and specie and bullion, will be found in the following table :—

State.	Proportion of dutiable Imports other than Intoxicants and Narcotics.	*Ad Valorem* Duty on dutiable Goods, other than Intoxicants and Narcotics.
	per cent.	per cent.
New South Wales	7·16	22·47
Victoria.....	41·21	28·63
Queensland	66·26	21·45
South Australia	45·93	36·80
Western Australia	67·59	16·34
Tasmania	84·49	20·69
Commonwealth	36·47	23·76
New Zealand	63·76	24·09
Australasia	41·10	23·85

The import duties collected in the various colonies during each of the last six years are set forth in the following table, drawbacks and refunds being deducted from the gross collections of those colonies for which such information can be obtained :—

State.	1894.	1895.	1896.	1897.	1898.	1899.
	£	£	£	£	£	£
New South Wales	2,008,803	1,974,827	1,367,431	1,239,084	1,250,289	1,335,194
Victoria	1,781,086	1,780,082	1,788,118	1,729,130	1,908,051	1,904,105
Queensland	1,107,149	1,237,848	1,267,288	1,160,404	1,287,757	1,434,270
South Australia	525,297	516,195	574,812	576,030	581,741	603,115
Western Australia	409,886	614,457	998,909	1,062,026	896,620	833,158
Tasmania	281,864	303,762	328,918	350,947	405,618	424,490
Commonwealth	6,114,085	6,427,171	6,325,476	6,117,621	6,330,076	6,534,332
New Zealand	1,572,467	1,619,970	1,765,073	1,912,161	1,961,726	2,046,452
Australasia	7,686,552	8,047,141	8,090,549	8,029,782	8,291,802	8,580,784

The revenue from import duties per head of population offers probably more food for reflection than the figures in the table just given. New South Wales raised the smallest revenue compared with population of any of the colonies of the group until 1891, a circumstance due to the comparatively low rate of the tariff; in 1892 its collections were about the average for Australasia, but at the beginning of 1896 a new tariff came into force which was designed to make the ports of the colony free to all imports except narcotics and stimulants, and although this intention was not fully carried out, yet the revenue per head of population is now very considerably less than in any of the other colonies. The variations in the rates from year to year are interesting as illustrating the force of the remarks made a few pages back in introducing the subject of Customs duties :—

State.	1894.	1895.	1896.	1897.	1898.	1899.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	1 12 6	1 11 3	1 1 3	0 19 1	0 18 11	0 19 10
Victoria	1 10 3	1 10 2	1 10 4	1 9 8	1 12 10	1 12 9
Queensland	2 10 6	2 14 8	2 14 4	2 11 0	2 15 3	3 0 0
South Australia	1 10 1	1 9 1	1 12 0	1 12 0	1 12 0	1 12 9
Western Australia	5 11 5	6 14 1	8 7 1	7 1 8	5 8 8	4 18 3
Tasmania	1 16 2	1 18 2	2 0 3	2 1 7	2 6 6	2 7 3
Commonwealth	1 15 11	1 17 0	1 15 10	1 14 0	1 14 7	1 15 4
New Zealand	2 6 4	2 6 10	2 10 0	2 13 0	2 13 3	2 14 7
Australasia	1 17 5	1 18 4	1 17 10	1 17 2	1 17 9	1 18 7

A general statement of the Customs duties levied in each colony would be of value, but there is so little agreement in the tariffs of the colonies that it is not possible to arrange the duties under general heads

so as to convey a distinct impression of the scope of each. Indeed, it is more than probable that the keenest analysis would fail to detect any scientific principle underlying the rates of duty charged. Specific duties on large items of general consumption were the first sources of revenue; these have been increased from time to time, but have rarely been diminished when once imposed. The necessities of the Treasury or other causes subsequently led to the imposition of *ad valorem* duties. The only canon of taxation which seems to have weighed with the framers of the tariffs was that raw material required for local manufactures should remain untaxed, and even this obvious rule has not infrequently been departed from. There seems, however, to be a general tendency to reduce import duties. The latest Victorian Customs Tariff has made important alterations in this direction; and the present tariff of New South Wales, as mentioned above, is the freest ever introduced into Australasia.

SOCIAL CONDITION.

THE high rates of wages which have generally prevailed in the Australasian colonies and the cheapness of food have permitted the enjoyment of a great degree of comfort, if not of luxury, by a class which elsewhere knows little of the one and nothing of the other; and even in these times of trade depression and reduced wages it may safely be said that the position of the wage-earner in Australia is equal to that occupied by him in any other part of the world. Although a high standard of living is not conducive to thrift, saving has gone on with marked rapidity, notwithstanding the industrial disturbances resulting from the great strikes and the bank crisis of 1893. Some idea of the rate and extent of this accumulation of wealth may be obtained from the tables showing the growth of deposits with banks. The banking returns, however, afford in themselves but an incomplete view of the picture; it should also be regarded from the standpoint of the expenditure of the people. Both of these subjects are dealt with in their proper places in this volume, and these evidences of the social condition of the people need not, therefore, be further considered here.

Newspapers and Letters.

Few things show more plainly the social superiority of a civilized people than a heavy correspondence and a large distribution of newspapers. In these respects all the colonies of Australasia have for many years been remarkable. In proportion to population it is doubtful whether any country in the world can boast of a larger number or a better class of newspapers than they publish. Great advances were made in this respect between 1871 and 1891, but the rate of progress, both in number and in excellence of production, has been even more rapid since the year last named. There are no means of correctly estimating the number of newspapers actually printed and distributed in the colonies, because the Post-office carries but a small proportion of the circulation. For purposes of comparison with other countries, however, it may be stated that during the year 1899 no less than 106,165,400 newspapers passed through the Post-offices of the various colonies, giving the large proportion of 24 per head of population. In the same year the number of letters and post-cards carried was 238,253,200, being 54 for every person in Australasia. An examination

of the statistics of other countries shows that these colonies stand third among the countries of the world in the transmission of correspondence, being only exceeded by the United Kingdom and the United States of America per head of population.

There are 964 newspapers published in Australasia; 287 in New South Wales, of which 82 are published in Sydney and suburbs; 332 in Victoria, of which 130 are published in Melbourne; 111 in Queensland; 45 in South Australia; 22 in Western Australia; 15 in Tasmania; and 152 in New Zealand.

Parks, Museums, and Art Galleries.

All the Australasian capitals are liberally supplied with parks and recreation-grounds. In Sydney and suburbs there are parks, squares, and public gardens comprising an area of 3,131 acres, including 530 acres which form the Centennial Park. Then there is the picturesque National Park, of 36,320 acres, situated about 16 miles from the centre of the metropolis; and, in addition to this, an area of 35,300 acres, in the valley of the Hawkesbury, has been reserved for public recreation under the name of Ku-ring-gai Chase. Thus Sydney has two extensive and picturesque domains for the enjoyment of the people at almost equal distances north and south from the city, and both accessible by railway. Melbourne has about 5,400 acres of recreation-grounds, of which about 1,750 acres are within the city boundaries, 2,850 acres in the suburban municipalities, and 800 acres outside those municipalities. Adelaide is surrounded by a broad belt of park lands, and also contains a number of squares within the city boundaries, covering altogether an area of 2,300 acres. Brisbane, Hobart, Perth, and the chief cities of New Zealand are also well provided for in this respect. In all the colonies large areas of land have been dedicated as public parks. There are fine Botanic Gardens in Sydney, Melbourne, Brisbane, Adelaide, and Hobart, which are included in the areas above referred to. Each of these gardens has a special attraction of its own. They are all well kept, and reflect great credit upon the communities to which they belong.

The various capitals of the colonies, and also some of the prominent inland towns, are provided with museums for the purposes of instruction as well as recreation; and in Sydney, Melbourne, Brisbane, Adelaide, and Hobart there are art galleries containing excellent collections of paintings and statuary. All these institutions are open to the public free of charge.

Public Charities.

One of the most satisfactory features of the social condition of the Australian communities is the wide distribution of wealth, and the consequently small proportion of people who are brought within the reach of want. In the United Kingdom, the richest country of Europe,

only nine out of every hundred of the population possess property of the value of £100, while in Australasia the number is not less than sixteen, and the violent contrast between the rich and the poor which blots the civilization of the old world is not observable in these young states. It is, unfortunately, only too plain that a certain amount of poverty does exist in the colonies; but there is a complete absence of an hereditary pauper class, and no one is born into the hopeless conditions which characterize the lives of so many millions in Europe, and from which there is absolutely no possibility of escape. No poor-rate is levied in Australasia, the assistance granted by the State being usually tendered to able-bodied men who find themselves out of employment in times of depression, and taking the form of payment, in money or in rations, for work done by them.

The chief efforts of the authorities, as regards charity, are directed towards the rescue of the young from criminal companionship and temptation to crime, the support of the aged and infirm, the care of the imbecile or insane, and the subsidising of private institutions for the cure of the sick and injured and the amelioration of want. Even where the State grants aid for philanthropic purposes the management of the institutions supervising the expenditure is in private hands, and in addition to State-aided institutions there are numerous charities wholly maintained by private subscriptions, whose efforts for the relief of those whom penury, sickness, or misfortune has afflicted are beyond all praise.

The rescue of the young from crime is attempted in two ways—first, by means of Orphanages and Industrial Schools, where children who have been abandoned by their natural guardians, or who are likely, from the poverty or incapacity of their parents, to be so neglected as to render them liable to lapse into crime, are taken care of, educated, and afterwards apprenticed to some useful calling; and second, by sequestering in Reformatories children who have already committed crime, or whose parents or guardians find themselves unable to control them; but the accommodation in the latter class is very limited, and might well be extended.

Although a century has elapsed since settlement commenced in Australasia, its resources are by no means developed, and very many men are at work far away from the home comforts of everyday life, and from home attendance in case of sickness or injury. Owing to the peculiar nature of the occupations in which a great part of the adult male population is employed, accidents are very common, the annual death-rate being about 8 per 10,000 living, and form the majority of the cases treated, especially in the districts outside the metropolitan area. Hospitals are therefore absolutely essential under the conditions of life in the rural districts of the colonies, and they are accordingly found in every important country town. Below will be found the number of hospitals in each colony, with the number of indoor patients treated during the year mentioned, and the tota' expenditure for the same year. Unfortunately, the South Australian and Western

Australian returns are defective, as will be seen by the note appended to the table :—

State.	Year.	Hospitals.	Indoor patients treated.	Expenditure.
		No.	No.	£
New South Wales...	1899	110	29,770	158,046
Victoria	1898-9	51	25,539	168,276
Queensland	1898	57	19,990	100,505
South Australia ...	1899	8	*3,493	*18,201
Western Australia..	1898-9	23	†2,655	†15,667
Tasmania	1898	11	3,220	19,993
Commonwealth	.....	260	84,667	480,688
New Zealand..... ...	1898	42	11,558	105,752
Australasia.....	.....	302	96,225	586,440

* Adelaide Hospital only. † Perth and Fremantle Hospitals.

All the colonies possess institutions for the care of the insane, which are under Government control. The treatment meted out to the inmates is that dictated by the greatest humanity, and the hospitals are fitted with all the conveniences and appliances which modern science points out as most calculated to mitigate or remove the affliction from which these unfortunate people suffer. The following table shows the number of insane patients under treatment in the asylums of New South Wales, Victoria, and New Zealand during 1899, and of the other colonies during 1898, the total expenditure on hospitals for the insane during the year, and the average expenditure per inmate under treatment. The question of insanity is treated farther on in this chapter :—

State.	Insane Patients under treatment.	Total Expenditure.	Average Expenditure per Inmate under treatment.
	No.	£	£ s. d.
New South Wales	5,033	119,435	23 14 7
Victoria	5,383	112,746	20 18 11
Queensland	1,800	42,390	23 11 0
South Australia	1,140	22,410	19 13 2
Western Australia.....	280	8,112	28 19 5
Tasmania	444	12,083	27 4 3
Commonwealth	14,080	317,176	22 10 6
New Zealand	2,990	53,764	17 19 8
Australasia	17,070	370,940	21 14 7

The amounts expended on Destitute Asylums and Benevolent Societies cannot be separated from other items of expenditure in some of the colonies. As far as they can be ascertained they are given in the following table, together with the number of adult inmates of the various asylums at the end of the year mentioned :—

State.	Year.	Inmates.	Expenditure.
		No.	£
New South Wales	1899	5,082	150,273
Victoria	1898–9	3,550	67,943
Queensland	1898	1,212	34,439
South Australia	1898	643	5,710
Western Australia	1898	533	8,407
Tasmania	1898	594	7,788
Commonwealth	.....	11,614	274,560
New Zealand	1898	1,180	33,755
Australasia	.....	12,794	308,315

In addition to the above, a liberal amount of out-door relief is given in all the Australasian colonies, and destitute children are taken care of, either by being supported in the Government institutions or by being boarded out to persons deemed able to take care of them properly. As far as can be judged from the imperfect returns, adding together the amount received from the Government and the amount of private subscriptions, the expenditure in the whole of the Australasian colonies in connection with all forms of relief and in aid of hospitals and other charitable institutions is certainly not less than £1,250,000 per annum. This sum, though not excessive in proportion to the population, may yet appear large in view of the general wealth of the colonies, which should preclude the necessity of so many seeking assistance ; and there is the risk that the charitable institutions may encourage the growth of the pauper element, for while free quarters and free food are so accessible those who are disinclined to work are tempted to live at the public expense. It should be stated, however, that of the total number of persons who seek hospital relief, less than one-half are natives of the colonies, the remainder being mostly natives of the United Kingdom, with a few who were born in a European country or in China. This, however, cannot be taken as evidence of the superiority of the Australian born. The inmates of the institutions referred to are in almost all cases aged persons, and probably not more than half the number of aged persons are Australian born.

Crime.

In all the colonies proceedings against a person accused of an offence may be initiated either by the arrest of the culprit or by summoning him to appear before a magistrate. Serious offences, of course, are rarely dealt with by process of summons; but, on the other hand, it is not uncommon for a person to be apprehended on a very trivial charge, and this circumstance should not be forgotten in dealing with arrests by the police, which are unusually numerous in some of the colonies. Unfortunately, it is not easy to say how far the police of one colony are disposed to treat offenders with such consideration as to proceed against them by summons, and how far those of another colony are content to adopt similar action; for in most of the provinces the records do not draw a distinction between the two classes of cases; and in the table given on page 366, showing the number of persons charged before magistrates in each colony during the year 1898, offenders who were summoned to appear are included with those arrested, except in the case of Victoria, whose criminal statistics seem to deal only with arrests. It is likewise difficult to make a true comparison between the various colonies in the matter of the prevalence of crime, for there are a number of circumstances which must considerably affect the criminal returns and modify their meaning. The first of these, of course, is the question of the strength of the police force and its ability to cope with lawlessness, which must be decided chiefly by the proportion of undetected crime which takes place in the colonies. The policy adopted by the chief of police in regard to trivial breaches of the public peace and other minor offences against good order must also be taken into consideration; and then there are considerable differences between the criminal codes of the colonies, and in the number of local enactments, breaches of which form a large proportion of the minor offences taken before the Courts. Also, when the returns of the lower Courts are laid aside and the convictions in superior Courts taken up, the comparison is affected by the jurisdiction of the magistrates who committed the prisoners. In New South Wales, for example, the jurisdiction of the lower Courts is limited to imprisonment for six months, except in regard to cases brought under one or two Acts of Parliament, such as the Chinese Restriction Act, prosecutions under which are very few; while in Victoria a large number of persons are every year sentenced in Magistrates' Courts to imprisonment for terms ranging from six months to three years. It is apparent, therefore, that in any comparison drawn between the number of convictions in the superior Courts of New South Wales and of Victoria, the former colony must appear to great disadvantage.

An investigation into the differences between the law of New South Wales and of Victoria in respect to the jurisdiction of magistrates discloses some important results. Under the Victorian Crimes Act of 1890, 54 Victoriæ No. 1,079, it is provided by section 67 that Justices

may try persons under sixteen years of age for the offence of simple larceny or for any offence punishable as simple larceny no matter what the value of the property in question may be, and persons over sixteen years of age where the property said to have been stolen is not of greater value than £2; and it is further provided by the same section that if upon the hearing of such a charge the Justices shall be of opinion that there are circumstances in the case which render it inexpedient to inflict any punishment, they shall have power to dismiss the charge without proceeding to a conviction. This provision, it is needless to say, is likely to materially reduce the number of convictions for larceny in Victoria. In New South Wales, on the other hand, the law does not give Justices any such power. In every case where the offence is proved they must convict the accused person, although in the case of offenders under the age of sixteen years they may discharge the convicted person on his making restitution, or in other cases deal with him under the First Offenders' Act and suspend the sentence; but in all such cases the conviction is placed on record and is accounted for in the criminal statistics of the colony. Section 69 of the same Victorian Act gives Justices power to deal with any case of simple larceny, or of larceny as a clerk or servant, or of stealing from the person, when the accused pleads guilty, the punishment being imprisonment for any term not exceeding twelve months; while in New South Wales the law does not give Justices the power to deal with such cases when the property alleged to have been stolen exceeds the value of £20. This section must therefore tend materially to reduce the number of cases committed for trial in Victoria for the offences mentioned, although in all such cases the Justices may commit the accused person if they think fit to do so. Furthermore, it is provided by section 370 of the Crimes Act of 1890 that suspected persons who have been convicted of capital or transportable felony elsewhere and are found in Victoria may be arrested and sentenced to imprisonment for three years in the case of a male, and for one year in the case of a female. Such a protective provision is in force in some of the other provinces as well as in Victoria, and its absence in New South Wales has made that colony the chosen refuge of many of the criminals of the other colonies; for there they may lay their plots in peace and enjoy immunity from arrest until the police discover some proof of their complicity in fresh crime or can charge them with being in possession of property which may reasonably be regarded as having been stolen. It is not, however, only in respect to serious offences that the law of Victoria differs from that of New South Wales, for under the Victorian Police Offences Act of 1890 drunkenness in itself is no crime, and must be allied with disorderly conduct before the person may be punished. These statements all go to show in what important respects the criminal statistics of the colonies must differ from each other, and how great care must be taken in making comparisons.

During the year 1898, as far as can be gathered, 150,496 persons were charged before magistrates in Australasia, 113,272 being summarily

convicted and 33,570 discharged, while 3,654 were committed. The returns of each of the seven colonies will be found below. It should be explained that in the case of New Zealand and Western Australia each charge is counted as a separate person—a proceeding which, of course, tells against those colonies; while in Victoria the returns only deal with arrested persons, no record being published of the summons cases dealt with in that colony :—

State.	Persons charged.	Summarily dealt with.		Committed.
		Discharged.	Convicted.	
New South Wales.....	55,442	9,271	44,876	1,295
Victoria	26,587	8,933	16,987	667
Queensland.....	20,437	3,357	16,633	447
South Australia.....	6,558	1,230	5,112	216
Western Australia ...	14,902	4,913	9,659	330
Tasmania	4,336	915	3,363	58
Commonwealth ...	128,262	28,619	96,630	3,013
New Zealand	22,234	4,951	16,642	641
Australasia.....	150,496	33,570	113,272	3,654

Taking the whole of Australasia, rather more than thirty-four persons out of every thousand were charged before magistrates during the year 1898—a figure which compares favourably with the rates for previous years. Only three colonies—Western Australia, Queensland, and New South Wales—exceed the average amount of disorder and crime as disclosed by the police court returns. The very large proportion of adult males to the population of the first-named colony, and its present industrial conditions, place it, of course, in quite an exceptional position; while in Queensland and New South Wales there are greater floating populations, from the ranks of which a large percentage of offenders is drawn, than in the other colonies which have better records. The province with the least disorder and crime is South Australia, where the persons answering to charges in the lower Courts only form 18·06 per thousand of the population. Next come Victoria with 22·88 per thousand; Tasmania, with 24·86; and New Zealand, with 30·20; while, as before stated, Western Australia, Queensland, and New South Wales have the highest proportions, namely, 90·30, 43·86, and 41·92 per thousand respectively. In the case of Western Australia, the returns leave little doubt that there has been a large influx of criminals from the eastern colonies, because the rate is more than twice that of Queensland, the next colony. The rate is, however, unduly increased by including the charges brought against the aborigines, and also from the fact that, as stated before, each offence is counted as a separate person; but

in the absence of any exact statistical information, there is no option but to use the figures presented. In New South Wales and Victoria, about every ninety persons charged are accused of 100 offences, and assuming the same ratio to hold in Western Australia, it is estimated that if these two mentioned factors were excluded, the rate in Western Australia would be a little under 78 per 1,000. The New Zealand rate is also affected by the last-mentioned circumstance. The following table shows the proportion of persons charged before magistrates in each colony during the year; also the percentages of the persons discharged, convicted, and committed of the whole number charged:—

State.	Persons charged per 1,000 of population.	Percentages of total persons charged.			
		Discharged.	Convicted.	Summarily dealt with.	Committed.
New South Wales	41·92	16·72	80·94	97·66	2·34
Victoria	22·88	33·60	63·89	97·49	2·51
Queensland	43·86	16·42	81·39	97·81	2·19
South Australia.....	18·06	18·76	77·95	96·71	3·29
Western Australia	90·30	32·97	64·82	97·79	2·21
Tasmania	24·86	21·10	77·56	98·66	1·34
Commonwealth	35·11	22·31	75·34	97·65	2·35
New Zealand	30·20	22·27	74·85	97·12	2·88
Australasia.....	34·29	22·30	75·27	97·57	2·43

It will be seen from the above table that out of every hundred persons charged before magistrates in Australasia in 1898, 97·57 were summarily dealt with, 22·30 being discharged and 75·27 convicted, while only 2·43 were committed to higher courts. The colony with the highest percentage of cases summarily disposed of and the smallest proportion of committals was Tasmania; while Victoria, although the magistrates there have a much wider jurisdiction than in New South Wales and some of the other colonies, had the lowest proportion of cases summarily dealt with, with the exception of South Australia. This was without doubt due to the fact that, as already pointed out, summons cases, which usually cover minor offences, are not included in the criminal statistics of the colony. As a matter of fact, the Victorian returns should show a very high percentage of cases summarily disposed of; for an inspection of the statistics discloses the fact that, owing to this wider jurisdiction, the magistracy of the colony, in 1898, sentenced 14 persons to two years' imprisonment, 234 to periods between one year and two years, and 341 to terms of six months and under one year. Many of these persons, had they been tried in New South Wales, would have been convicted in higher courts. Another important point to be noted is that Victoria has the largest proportion of discharges, and if the

theory be dismissed as untenable that the police in that colony are more prone to charge persons on insufficient grounds than in the other colonies, it must be concluded that the magistrates of Victoria deal more leniently with accused persons than is the case elsewhere; indeed, it has already been shown that the Crimes Act of 1890 provides for the discharge without conviction of persons found guilty of certain offences. The lowest proportion of discharges is to be found in Queensland and New South Wales, which also have the highest percentage of summary convictions; and the figures testify to the stringency with which the criminal laws are administered in those colonies.

Of the 150,496 persons brought before magistrates during the year 1898, only 27,885 were charged with offences which can fairly be classed as criminal, the overwhelming majority being accused of drunkenness and other offences against good order, of lunacy and vagrancy, and of breaches of Acts of Parliament, which have a tendency to multiply to a great extent. For present purposes the accused persons may be divided as in the table given below, offences against the person and against property being regarded as serious crime. Of course, amongst the other offenders are to be found a few charged with grave misdemeanours, but against these may be put trifling assaults, which are included with crimes against the person :—

State.	All Offenders.	Serious Offenders.			Minor Offenders.
		Against the Person.	Against Property.	Total.	
New South Wales	55,442	4,320	6,041	10,361	45,081
Victoria	26,587	1,157	2,774	3,931	22,656
Queensland	20,437	2,098	2,133	4,231	16,206
South Australia	6,558	391	696	1,087	5,471
Western Australia	14,902	1,071	1,955	3,026	11,876
Tasmania	4,336	349	711	1,060	3,276
Commonwealth	128,262	9,386	14,310	23,696	104,566
New Zealand	22,234	1,395	2,794	4,189	18,045
Australasia	150,496	10,781	17,104	27,885	122,611

This examination into the nature of the offences explains in some measure the comparatively unfavourable position of New South Wales as shown by the previous tables; for of the 55,442 accused persons in that colony, the minor offenders numbered 45,081, or 81·3 per cent. No doubt the large number of trivial cases in New South Wales is accounted for by the greater strictness of police administration. Victoria actually shows 85·2 per cent. of minor offenders, but in consequence of a difference in the tabulation of the returns its position is not nearly so favourable as it appears to be on the surface.

In New South Wales, and, it is to be presumed, in most of the other colonies, a person accused of two or more offences is entered as charged with the most serious in the eyes of the law; while in Victoria he is entered as charged with the first offence committed, any others, however serious, arising out of his capture, being left out of consideration. For example, if a person is arrested for drunkenness, and he assaults his captors while on the way to the station, he is entered in the returns of New South Wales, as they are here presented, as charged with an offence against the person, and thereby helps to swell the amount of serious crime; but in Victoria he is entered as charged with drunkenness and disorderly conduct, and the charge of assault, on which he may be convicted and sentenced to a term of imprisonment, is not disclosed. This fact must therefore be taken into account in comparing the proportions of the various classes of offenders per thousand of population, which are appended :—

State.	Per thousand of population.				
	All Offenders.	Serious Offenders.			Minor Offenders.
		Against the Person.	Against Property.	Total.	
New South Wales	41·92	3·26	4·57	7·83	34·09
Victoria	22·88	0·99	2·39	3·38	19·50
Queensland	43·86	4·50	4·58	9·08	34·78
South Australia	18·06	1·08	1·91	2·99	15·07
Western Australia	90·30	6·49	11·85	18·34	71·96
Tasmania	24·86	2·00	4·08	6·08	18·78
Commonwealth	35·11	2·57	3·91	6·48	28·63
New Zealand	30·20	1·90	3·79	5·69	24·51
Australasia	34·29	2·45	3·90	6·35	27·94

It will be seen that, relatively to population, the colony with the largest number of serious offenders was Western Australia, which had a proportion of 18·34 per thousand. Queensland followed with a proportion of 9·08, while New South Wales and Tasmania occupied third and fourth positions with 7·83 and 6·08 per thousand respectively. The rate of New Zealand was 5·69 per thousand, while that of Victoria is set down at 3·38, and South Australia closes the list with 2·99. It would be interesting to compare the crime of the principal colonies on the basis of the number of males of such ages as contribute to the ranks of offenders; but this cannot accurately be done at the present time, in consequence of the changes which have taken place in the age composition of the people since the last census. In explanation of the position of Western Australia, it is well known to the police of Victoria

and New South Wales—and, indeed, the fact is proved by the records of the prisoners received into Fremantle gaol—that a large number of criminals have left those colonies for the west during the last few years.

About one-third of the minor offenders of Australasia are charged with drunkenness. From the table given below it will be seen that in all the colonies 51,360 cases of drunkenness were heard during the year 1898, convictions being recorded in 43,853 cases, or 85·38 per cent. of the total number. The colony with the highest number of cases relatively to population was Western Australia, the rate of which was 18·79 per thousand persons, followed by Queensland with 15·28, New South Wales with 14·67, and Victoria with 11·82, while Tasmania was last with a rate of only 3·49 per thousand. The figures for Victoria, however, only refer to apprehensions, information respecting persons summoned to answer a charge of drunkenness not being available, while, as already pointed out, drunkenness in itself is not a crime in that colony, but must be aggravated by disorderly conduct. In the case of Western Australia, it must be remembered that the proportion of adult male population is very high. From the figures showing the number of convictions, it will be seen that the magistrates of that colony and of Victoria take a somewhat lenient view of this offence, and only record convictions in about 59 and 53 per cent. of the cases respectively, while in the other colonies the percentage ranges from 93·6 to 99·6 :—

State.	Charges of Drunkenness.	Convictions.		Per 1,000 persons.	
		Total.	Percentage of Charges.	Charges.	Convictions.
New South Wales	19,397	19,263	99·31	14·67	14·57
Victoria	13,728	8,037	58·54	11·82	6·92
Queensland	7,121	7,091	99·58	15·28	15·22
South Australia	1,847	1,805	97·73	5·09	4·97
Western Australia	3,100	1,630	52·58	18·79	9·88
Tasmania	608	569	93·59	3·49	3·26
Commonwealth	45,801	38,395	83·83	12·54	10·51
New Zealand	5,559	5,458	98·18	7·55	7·41
Australasia	51,360	43,853	85·38	11·70	9·99

A return showing only the number of cases of drunkenness is not, however, a safe index of the abuse of alcoholic liquors, for a great deal depends on the state of the law and the manner in which it is administered, and it is evident that the maintenance of the law intended to preserve public decency will always be less strict in sparsely-settled country districts than in larger centres of population where the police are comparatively more numerous, if not in proportion to the population, at least in proportion to the area they have under their supervision; and further, will

vary according to the diverse nature of the duties performed by the police. The quantity of intoxicants consumed per head is perhaps a safer index of the habits of communities living under like conditions; but comparisons so based should not be pushed to extremes, for, as has often been pointed out, the larger part of the alcohol which enters into consumption is that consumed by the population who are not drunkards. The average quantity of intoxicants used in each colony during 1898 is given below, wines and beer being reduced to their equivalent of proof spirit. The consumption of the various kinds of intoxicants will be found in the chapter on "Food Supply and Cost of Living":—

State.	Proof Gallons of Alcohol per head of population.
New South Wales	2·22
Victoria	3·00
Queensland	2·65
South Australia	2·20
Western Australia	4·96
Tasmania	1·44
New Zealand	1·80
Australasia	2·47

These figures show the importance which must be attached to police administration when studying the question of drunkenness.

The strength of the police force in each of the colonies at the end of 1898 is given below :—

State.	Police.			Inhabitants to each Police Officer.	Area to each Constable in Country Districts.
	Metropolitan.	Country.	Total.		
	No.	No.	No.	No.	Sq. miles.
New South Wales	792	1,165	1,957	682	267
Victoria	665	750	1,415	820	117
Queensland	163	641	804	587	1,043
South Australia	170	182	352	1,037	4,964*
Western Australia	101	320	421	399	2,957
Tasmania	43	231	274	647	113
Commonwealth	1,934	3,289	5,223	704	904
New Zealand	58	492	550	1,352	212
Australasia	1,992	3,781	5,773	766	814

* Including Northern Territory.

A comparison of the cost of the police forces of the various colonies will be found below. The greater number of mounted troopers in those colonies where very large and thinly-populated districts have to be

controlled, tends to make the average cost somewhat higher than in the other provinces :—

State.	Total Cost of Police Force.	Average Cost per Constable.	Average Cost per Inhabitant.
	£	£ s. d.	s. d.
New South Wales	332,824	170 1 4	5 0
Victoria	260,880	184 7 4	4 6
Queensland	175,095	217 15 7	7 6
South Australia	73,568	209 0 0	4 1
Western Australia	107,515	255 7 7	13 0
Tasmania	35,511	129 12 0	4 1
Commonwealth	985,393	188 13 3	5 5
New Zealand	108,627	197 10 1	2 11
Australasia	1,094,020	189 10 2	5 0

The record of cases heard before a Court of Magistrates cannot be regarded as altogether a trustworthy indication of the social progress of Australasia, because, as has been pointed out, it includes many kinds of offences which cannot fairly be classed as criminal, and the number of these has a tendency to increase with the increase of local enactments. The committals for trial, taken in conjunction with the convictions for crime in the Superior Courts may be regarded as much more conclusive on the question of the progress of society or the reverse. In some respects even this evidence is misleading, for, as already shown, in the less populous provinces there are no Courts intermediary between the Magistrates' and the Supreme Courts, so that many offences which in New South Wales, for example, are tried by a jury, are in some of the other provinces dealt with by magistrates; and even in Victoria, where there are Courts of General Sessions, magistrates have a much wider jurisdiction than in New South Wales. But for the purpose of showing the decrease of serious crime in Australasia as a whole, the proportion of committals and of convictions in Superior Courts may fairly be taken; and this information is given below. It will be seen that during the thirty-seven years, from 1861 to 1898, the rate of committals per thousand of population has dropped from 2·2 to 0·8, and of convictions from 1·3 to 0·5 :—

Year.	Per 1,000 of Population.	
	Committals.	Convictions in Superior Courts.
1861	2·2	1·3
1871	1·4	0·8
1881	1·2	0·7
1891	1·1	0·6
1898	0·8	0·5

In noting these facts and comparing the results with those obtained in Great Britain during the same period, it must not be forgotten that some of the provinces of Australasia have been compelled gradually to reform a portion of their original population, and that in the case of colonies such as Victoria and Queensland, not originally peopled in any degree by convicts, the attractions of the gold-fields have drawn within their borders a population by no means free from criminal instincts and antecedents. Viewed in this light, the steady progress made cannot but be regarded as exceedingly satisfactory, and the expectation may not unreasonably be entertained that the same improvement will be continued until the ratio of crime to population will compare favourably with that of any part of the world.

Below will be found the number of convictions in the Superior Courts of each colony, at decennial periods from 1861 to 1891, as well as for the year 1898 :—

State.	1861.	1871.	1881.	1891.	1898.
New South Wales	437	628	1,066	964	758
Victoria	846	511	332	729	402
Queensland	24	91	92	232	248
South Australia	62	91	213	90	157
Western Australia	35	65	61	44	154
Tasmania	127	74	51	63	33
Commonwealth	1,531	1,460	1,815	2,122	1,752
New Zealand	100	162	270	276	351
Australasia	1,631	1,622	2,085	2,398	2,103

The following table gives a classification of the offences for which the accused persons were convicted during 1898; also the rate of convictions and of committals per 1,000 of population. It will be seen that the rate of convictions in the Superior Courts of Victoria is 0·35 per thousand; but if the persons who received sentences of over six months' imprisonment at the hands of magistrates were taken into account, the proportion would be as high as that of New South Wales. The colony of Tasmania has an even smaller proportion of convictions in Superior

Courts than Victoria, and the rate for South Australia is but slightly higher; but in those two provinces, as already pointed out, no intermediate Courts exist:—

State.	Convictions in Superior Courts.					Committals per 1,000 of Population.
	Classification of Offences.			All Convictions.	Per 1,000 of Population.	
	Against the Person.	Against Property.	Other.			
New South Wales	214	447	97	758	0·57	0·98
Victoria	115	262	25	402	0·35	0·57
Queensland	58	169	21	248	0·53	0·96
South Australia	16	129	12	157	0·43	0·59
Western Australia	35	91	28	154	0·93	2·00
Tasmania	14	14	5	33	0·19	0·33
Commonwealth	452	1,112	188	1,752	0·48	0·82
New Zealand	53	284	14	351	0·48	0·87
Australasia	505	1,396	202	2,103	0·48	0·83

There is no doubt that New South Wales would appear to much greater advantage in a comparison of crime statistics if there existed in that colony any law preventing the entrance of criminals, such as is rigidly enforced in most of the other provinces. In the absence of such a protective measure, the mother colony has become a happy hunting-ground for the desperadoes of Australasia. That there is ground for this assertion is shown by the fact that whereas in New South Wales offenders born in the colony only formed 34 per cent. of the total apprehensions in 1898, in Victoria 46 per cent. of arrested persons were of local birth; while at the census of 1891 the element of the population of local birth was larger in the former than in the latter colony.

The punishment of death is very seldom resorted to except in cases of murder, though formerly such was not the case. Thus the number of executions steadily declined from 151 during the decade 1841–50 to 66 during the ten years 1881–90. In South Australia the extreme penalty has been most sparingly inflicted, there having been only 11 executions in the twenty-eight years which closed with 1898. The following table shows the number of executions in each province during each decade of the 50 years ended 1890, also those which took place in 1891–95 and 1896–98. Queensland was incorporated with New South Wales until the end of 1859, though Victoria became a separate colony

in 1851. It will be noticed that the returns are defective so far as Western Australia is concerned:—

State.	1841-50.	1851-60.	1861-70.	1871-80.	1881-90.	1891-95.	1896-98.
New South Wales	68	38	34	27	23	15	5
Queensland		14	18	15	16	...	
Victoria		47	41	19	13	12	3
South Australia	.....	7	12	6	2	2	1
Western Australia	.....	.....	.....	.....	.....	6	2
Tasmania	83	32	15	3	5	1	...
New Zealand	.....	.....	... ..	12	8	1	4
Total	151	124	116	85	66	53	15

The returns relating to the prisons of the colonies are in some cases very incomplete. The prisoners in confinement at any specified time may be divided into those who have been tried and sentenced, those who are awaiting their trial, and debtors. The returns of five of the colonies allow of this distinction being made. The number and classification of prisoners in confinement on the 31st December, 1898, were as follow:—

State.	Tried and Sentenced.	Awaiting Trial.	Debtors.	Total.
New South Wales	1,934	147	1	2,082
Victoria	1,136	75	.....	1,211
Queensland	506	39	.....	545
South Australia	287*	8	.....	295
Western Australia	560	6	2	568
New Zealand	533	62	.....	595
Total	4,956	337	3	5,296

* Including debtors.

The returns of Tasmania do not enable the distinction made in the above table to be drawn, but there were 96 prisoners in Tasmanian gaols at the end of 1898; so that the total number of persons in confinement in the gaols of Australasia, at the close of 1898, may be stated as 5,400, equal to 1·24 in every thousand of the population.

Suicides.

The total number of persons who committed suicide in Australasia during 1898 was 527—433 males and 94 females—corresponding to a rate of 1·20 per 10,000 living, and the table below shows the number of deaths and the rates in each colony, in five-year periods since 1870.

It is believed that the actual number of suicides is even larger than is shown in the tables, especially during recent years; for there is a growing disposition on the part of coroners' juries to attribute to accident what is really the result of an impulse of self-destruction.

Total number of deaths.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
New South Wales	212	297	368	578	713	534
Victoria	446	505	463	638	630	363
Queensland	72	141	179	292	349	228
South Australia	79	93	146	134	156	122
Western Australia	3*	7	23	22	73	90
Tasmania	28	37	27	43	63	35
New Zealand	89*	195	261	267	339	201
Australasia	.....	1,275	1,467	1,974	2,323	1,573

Death rate per 10,000 living.

New South Wales	·78	·90	·87	1·12	1·19	1·37
Victoria	1·17	1·23	1·02	1·21	1·08	1·04
Queensland	1·00	1·38	1·33	1·62	1·68	1·67
South Australia	·81	·77	·99	·87	·93	1·14
Western Australia	·29*	·50	1·46	1·05	2·19	2·07
Tasmania	·54	·68	·44	·63	·82	·69
New Zealand	·72*	·91	·99	·89	1·03	·93
Australasia	.....	1·02	·98	1·12	1·16	1·22

* Four years—1872-75.

The experience of Australasia agrees with that of other countries, namely, that the tendency to self-destruction is increasing. From the table above it is seen that the rate has been slowly but surely increasing since 1870. Tasmania has always had the lowest rate, while in New Zealand the rate is now about equal to that in England, where it is 0·92 per 10,000 living. Up to 1893, the three first named colonies in the table exhibited the highest rates, Queensland coming first; but since that year Western Australia has shown the largest proportional number of victims by suicide, due, no doubt, to the relatively large number of males in the colony, since males are three or four times as prone to take their own lives as females.

The most favoured means of committing suicide, in all the colonies, are poisoning, drowning, shooting, which is more common now than formerly, and hanging amongst males, and poisoning and drowning amongst females.

Illegitimacy.

Illegitimate births are rather numerous in the colonies, the total number in the whole of Australasia during 1899 being 6,878, equal to 5·76 per cent. of the total births. The following table shows the number of illegitimate births which have occurred in each colony in quinquennial periods since 1870, and the proportion per cent. of total births :—

Total Number of Illegitimate Births.

State.	1871–75	1876–80	1881–85	1886–90	1891–95	1896–99
New South Wales	4,369	5,401	6,949	9,394	11,875	10,017
Victoria	4,222	5,646	6,491	8,425	9,858	6,806
Queensland	846	1,447	1,990	3,117	3,516	3,265
South Australia	...	...	1,222	1,331	1,577	1,378
Western Australia	...	...	...	...	402‡	870
Tasmania	...	...	762†	911	1,136	1,058
New Zealand	523*	2,027	2,831	3,011	3,443	3,290
Australasia	...	...	20,245	26,189	31,807	26,684

Proportion per cent. of Total Births.

New South Wales	4·09	4·22	4·36	4·90	6·01	6·84
Victoria	3·10	4·27	4·63	4·89	5·45	5·46
Queensland	2·89	3·85	4·06	4·44	4·83	5·81
South Australia	...	...	2·16	2·50	2·98	3·64
Western Australia	...	...	...	...	4·75‡	5·13
Tasmania	...	...	4·35†	3·84	4·58	5·71
New Zealand	1·36*	2·30	2·93	3·20	3·77	4·38
Australasia	...	...	3·90	4·35	5·06	5·61

* Three years—1873–75. † Four years—1882–85. ‡ Four years—1892–95.

It is seen that New South Wales has always been in the unenviable position of exhibiting the highest proportion of illegitimate births, although up to 1890 it was closely followed by Victoria. Since 1890, however, the rate in New South Wales has increased very rapidly, as also in Queensland, which now stands second. In all the colonies illegitimacy is on the increase; and whereas less than twenty years ago each province had a lower rate than prevailed in England, they all, with the exception of South Australia, have now a higher rate.

The following table shows the proportion of illegitimate births in the United Kingdom, and in the chief countries of Europe, based on the experience of the latest five years available, the figures referring, in most cases, to the period 1894-8. In a majority of the European countries illegitimacy appears to be on the increase.

Country.	Illegitimate Births per cent.	Country.	Illegitimate Births per cent.
England and Wales...	4·21	Hungary	8·72
Scotland.....	7·10	France	8·84
Ireland	2·68	Belgium	7·64
Germany	9·24	Netherlands.....	2·81
Prussia	7·83	Sweden.....	10·65
Bavaria	14·00	Norway	7·26
Saxony	12·81	Italy	6·82
Austria	14·64		

Divorce.

The question of divorce is one of much interest to Australasia, as some of the colonies, especially New South Wales and Victoria, now offer great facilities for the dissolution of the marriage bond. The general opinion was that such facilities were calculated to increase divorce to an extent that would prove hurtful to public morals ; and so far as the experience of New South Wales was concerned, for the first few years after the passing of the Act multiplying the grounds on which divorce could be granted, the fear did not seem to be altogether groundless ; for in 1893 the number of decrees *nisi* granted rose to 305, from 102 in 1892, and in 1898 was still as high as 244. When, however, it is remembered that advantage would be taken of the change in law to dissolve marriages the bonds of which would have been broken long before under other circumstances, it is evident that there was little ground for the fear that this somewhat alarming increase would continue, and it was, therefore, not surprising to find a decline in 1898. In Victoria, where a very similar law came into operation in 1890, the number of divorces increased considerably, immediately after the passing of the Act, although not to the alarming extent experienced in New South Wales.

In New South Wales, under the Matrimonial Causes Act of 1873, the chief grounds on which divorce was granted were adultery after marriage on the part of the wife, and adultery with cruelty on the part of the husband. A measure, however, was passed through both Houses of the Legislature in 1892, and came into force in August of that year, which in the main assimilated the law to that of Victoria. Under this Act and

an Amending Act passed in 1893 petitions for divorce can be granted for the following causes, in addition to those already mentioned:—*Husband v. Wife.*—Desertion for not less than three years; habitual drunkenness for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned under sentence for three years or upwards; attempt to murder or inflict grievous bodily harm, or repeated assault on the husband within a year preceding the date of the filing of the petition. *Wife v. Husband.*—Adultery, provided that at the time of the institution of the suit the husband is domiciled in New South Wales; desertion for not less than three years; habitual drunkenness for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned for three years or upwards, or having within five years undergone various sentences amounting in all to not less than three years; attempt to murder or assault with intent to inflict grievous bodily harm, or repeated assault within one year previously. Relief can only be sought on these grounds should the petitioner have been domiciled in the colony for three years or upwards at the time of instituting the suit, and not have resorted to the colony for the purpose of having the marriage dissolved. In Queensland, South Australia, Western Australia, Tasmania, and New Zealand, divorces are granted principally for adultery on the part of the wife, and adultery coupled with desertion for over two years on the part of the husband.

In the subjoined table will be found the actual number of divorces and judicial separations granted during each of the years 1893–98. It will be seen that, taking the colonies as a whole, divorce has decreased since 1893, although there was an increase in 1897:—

State.	1893.		1894.		1895.		1896.		1897.		1898.	
	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.
New South Wales	306	9	313	14	301	11	234	8	246	13	247	17
Victoria	85	7	81	2	85	..	106	2	117	..	87	..
Queensland	5	2	6	..	4	..	3	2	10	1	7	..
South Australia	8	1	5	1	5	..	6	1	3	..	7	1
Western Australia	1	..	1	..	2	..	1	..	4	..	3	..
Tasmania	6	..	5	..	4	1	3	..	5	..	4	..
New Zealand	25	1	20	4	18	5	36	2	33	1	32	2
Australasia	436	20	431	21	419	17	389	15	418	15	387	20
Totals	456		452		436		404		433		407	
Divorces and separations per 10,000 marriages	184·3		182·3		169·9		144·2		150·6		137·7	

The following table shows the number of decrees of dissolution of marriage and judicial separation granted in each colony, in quinquennial

periods since 1871, as far as it is possible to procure the information. Divorce was legalised in New South Wales in 1873, and the figures of that colony for 1871–75 only cover the two years 1874 and 1875.

State.	1871–75.		1876–80.		1881–85.		1886–90.		1891–95.		1896–98.	
	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.
New South Wales	21	...	87	...	116	6	212	12	1087	55	727	38
Victoria	33	6	41	2	74	8	124	9	441	10	310	2
Queensland	4	1	14	...	5	2	26	3	26	3	20	3
South Australia	22	3	35	2	31	10	23	2	30	2	16	2
Western Australia	...	...	1	1	5	...	8	...	9	...	8	...
Tasmania	9	...	9	...	9	...	15	2	21	2	12	...
New Zealand	*...	*...	*...	*...	*...	*...	110	5	101	14	101	5
Australasia	89	10	187	5	240	26	518	33	1715	86	1194	50

* Information not available.

Taking the figures given in the foregoing table, and comparing them with the number of marriages celebrated during the same periods, the rates of divorce for the individual colonies, per 10,000 marriages, will be found below. It will be seen that the rate for New South Wales is higher than that of any country of the world except the United States and Switzerland. :—

State.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–98.
New South Wales	†23·5	33·6	32·5	54·8	272·3	277·5
Victoria	16·0	16·9	24·4	31·1	119·6	135·9
Queensland	8·0	18·7	6·0	19·0	21·4	23·0
South Australia	33·5	34·6	33·1	24·3	29·9	25·2
Western Australia	...	20·5	44·8	53·5	38·6	18·1
Tasmania	27·4	22·0	18·0	35·4	50·8	38·5
New Zealand	*...	*...	*...	63·5	56·9	67·9

* Information not available. † 1874 and 1875 only.

From the appended statement, which sets forth the latest divorce rates of the countries for which accurate statistics are obtainable, such rates being calculated on an experience of ten years wherever possible, it will be seen that there is a larger proportion of marriages dissolved in Australasia than in any other part of the British Empire, but that the rate for these colonies as a whole is largely exceeded by a number of foreign countries. Of countries where divorce laws are in force, no reliable

statistics are available for Denmark, Hungary, Russia, and Spain. In Italy and Portugal divorce is not recognised by law :—

Country.	Divorces per 10,000 Marriages.	Country.	Divorces per 10,000 Marriages.
Canadian Dominion ...	4	Cape Colony	98
United Kingdom	11	Netherlands	103
Norway	16	Germany	165
Austria Proper	43	France	180
Greece	50	Roumania	204
Belgium	81	Switzerland	432
Sweden	87	United States	612

In the United States of America no general system of registration of births, deaths, and marriages is in force. For the purpose of comparison, the marriage-rate of that country has been assumed to be 6·50 per 1,000 of mean population, and on that basis the 20,660 divorces granted annually during ten years would give an average of not less than 612 per 10,000 marriages.

In the Dominion of Canada divorce was, under the Union Act, assigned to the Federal Parliament; but those provinces which had established divorce courts before the accomplishment of federation were permitted to retain the jurisdiction which they already exercised. In the remaining provinces no divorce courts have been established since the constitution of the Dominion, and divorce can only be obtained by legislation, the matter being dealt with in each case as an ordinary private Act of Parliament, with this difference, however, that the Senate requires the production of such evidence in support of the application for relief as would be deemed sufficient in a court of law.

Insanity.

The number of insane persons in Australasia, under official cognizance in the various Government hospitals for the treatment of the insane, at the end of 1898 was 14,285, equal to 3·23 per 1,000 of the population, or corresponding to one insane person in every 309. This rate is about equal to that prevailing in England, where one person in every 313 is officially known to be insane.

An inspection of the table given below of the insane persons, both male and female, in each colony on 31st December, 1898, and the rate per 1,000 inhabitants of each sex, will disclose the fact that the rate of insanity varies greatly in the different provinces, and that the rate for males is everywhere higher than that for females, except in Western Australia, where 1·26 per 1,000 males, and 1·75 per 1,000 females are

insane, a result which appears to show that the female population of the western colony is under-estimated :—

State.	Number of Insane.			Per 1,000 of Population.		
	Males.	Females.	Total. Persons.	Males.	Females.	Total Persons.
New South Wales	2,479	1,594	4,073	3·45	2·59	3·05
Victoria	2,300	2,094	4,394	3·96	3·61	3·79
Queensland	1,018	550	1,568	3·89	2·62	3·32
South Australia	538	419	957	2·82	2·40	2·62
Western Australia	141	98	239	1·26	1·75	1·42
Tasmania	313	261	574	3·28	3·19	3·24
Commonwealth	6,789	5,016	11,805	3·47	2·92	3·21
New Zealand	1,472	1,008	2,480	3·75	2·87	3·34
Australasia	8,261	6,024	14,285	3·52	2·91	3·23

Victoria has the highest general rate, with 3·79 per 1,000, New Zealand coming next with 3·34, closely followed by Queensland with 3·32, and Tasmania with 3·24, although Tasmania has the second highest female rate. New South Wales, with 3·05, is below the mean rate for Australasia ; while South Australia, with 2·62, is well below ; and Western Australia, with 1·42, is the lowest of all.

There is one remarkable difference between the Australasian colonies and Great Britain, namely, that in England the greater proportion of insanity is found amongst women, whereas in the colonies it is found amongst men.

In England the rate per 1,000 males in 1897 was 3·00, and per 1,000 females 3·38, but this difference is gradually being reduced. In Australasia the greatest disproportion was in Queensland, where the male and female rates were respectively 3·89 and 2·62 per 1,000. The smallest difference between the sexes is found in those colonies where the male population follow in greater proportion what may be termed the more settled pursuits. In Tasmania the excess of the male over the female rate was only 0·09 and in Victoria 0·35.

There seems to be little doubt that insanity is slowly but surely increasing in the colonies, as it is in the United Kingdom and other countries. In England the rate has risen from 2·92 per 1,000 of population in 1884 to 3·20 in 1897, and in Scotland a similar rise has taken place from 2·75 per 1,000 in 1884 to 3·36 in 1897. The greater part of this increase is no doubt rightly attributed to an improvement in the administration of the Commissioners in Lunacy, by which a more accurate knowledge of the number of cases existent in the country has been gained ; but the steady growth of the rate in recent years, when statistical information has been brought to a high pitch of perfection,

plainly points to the fact that the advance of civilization, with the increasing strain to which the struggle for existence is subjecting body and mind, has one of its results in the growth of mental disease. In all the colonies of Australasia, with the sole exception of Tasmania, there is seen the same state of affairs as the insanity returns of Great Britain disclose, although the conditions of life press much more lightly on the individual here.

The experience of the various colonies is fairly represented in the following table, which shows the average number of insane in each colony per 1,000 of population, arranged in three five-years periods :—

State.	1884–88.	1889-93.	1894–98.
	Rate per 1,000 of Population.	Rate per 1,000 of Population.	Rate per 1,000 of Population.
New South Wales	2·77	2·76	2·97
Victoria	3·38	3·36	3·63
Queensland	2·42	2·89	3·22
South Australia	2·39	2·52	2·60
Western Australia	3·58	2·49	1·45
Tasmania	2·61	2·40	2·22
Commonwealth	2·91	2·94	3·09
New Zealand	2·72	2·93	3·25
Australasia	2·87	2·94	3·12

The only colonies where the rate is diminishing are Western Australia and Tasmania. In Western Australia the reason is probably that the hospital accommodation is limited, and that thereby many insane, especially males, escape notice.

It has been said that the trade depression lately experienced throughout Australasia, was the cause of an increase in insanity; and at first sight it looks as if this were so, because since 1892 there has been a steady increase in the proportion of the population detained in asylums. But looking at the rates of admissions this view does not seem to be altogether borne out. Probably one effect of depressed times is to send to the asylums a number of harmless but demented persons who, under other circumstances, would be supported by their relatives. In England and Wales it is found that the increase in insanity has taken place amongst those who are termed the "pauper" class—that is, those whose relatives are not in a position to support them after they lose their reason. On the other hand, the admissions in prosperous times are kept up by insanity either directly or indirectly induced by the indulgence which commonly follows high wages and large gains.

The following table shows the average annual number of admissions and readmissions into the asylums in each colony, and the rate per 1,000 of population, during each of the two quinquennial periods, 1889–93 and 1894–98 :—

State.	1889–93.		1894–98.	
	Average Number of Admissions per annum.	Rate per 1,000 of Population.	Average Number of Admissions per annum.	Rate per 1,000 of population.
New South Wales	622	0·55	718	0·56
Victoria	709	0·62	707	0·60
Queensland	265	0·67	259	0·58
South Australia	228	0·70	205	0·57
Western Australia	26	0·51	74	0·62
Tasmania	70	0·47	61	0·37
Commonwealth	1,920	0·60	2,024	0·57
New Zealand	413	0·65	576	0·81
Australasia	2,333	0·61	2,600	0·61

The table shows that on the whole the rate of admissions has remained constant throughout the decade, although it has risen slightly in New South Wales and more largely in Western Australia and New Zealand, and has decreased in all the other colonies.

The next table shows the total number of patients who were discharged from the asylums during the ten years 1889–98, either on account of recovery, permanent, or temporary, or on account of death, and the proportion borne by each to the total number who were under treatment during the period.

State.	Total under Treatment.	Discharged—recovered or relieved.		Died.	
		Number.	Per cent. of total under treatment.	Number.	Per cent. of total under treatment.
New South Wales	9,598	3,262	33·99	2,220	23·13
Victoria	10,711	3,192	29·80	3,048	28·46
Queensland	3,546	1,166	32·88	785	22·14
South Australia	2,924	1,260	43·09	683	23·36
Western Australia	664	279	42·02	126	18·98
Tasmania	1,003	280	27·92	271	27·02
Commonwealth	28,446	9,439	33·18	7,133	25·08
New Zealand	6,626	2,216	33·44	1,196	18·05
Australasia	35,072	11,655	33·23	8,329	23·75

It is seen that, of the total number under treatment, 33·23 per cent. were discharged either partially or wholly recovered, and that 23·75 per cent. died. South Australia shows the highest proportion of recoveries, and Tasmania the lowest, while New Zealand has the lowest death-rate, and Victoria the highest. Speaking generally, it is estimated that of the persons who are discharged from the asylums in Australasia, some 28 per cent. suffer a relapse and are readmitted; and it may be said that out of every 1,000 persons who are admitted for the first time, 420 will recover, and the sufferings of the remaining 580 will only be terminated by death.

Very little information is available as to the exciting or predisposing causes of insanity in the different colonies, New South Wales being the only one concerning which there is complete information. But that colony may be taken as typical of the whole, as the customs and conditions of living do not vary greatly in any of them, and the statement below enables a comparison to be made with the principal assigned causes of insanity in England and Wales. The causes are stated in proportion to the average annual number of admissions.

Cause.	Males.		Females.	
	New South Wales.	England and Wales.	New South Wales.	England and Wales.
	per cent.	per cent.	per cent.	per cent.
Domestic trouble, Adverse circumstances, Mental anxiety	9·2	17·9	11·3	19·6
Intemperance in drink	12·4	20·9	4·2	8·5
Hereditary influence, ascertained; Congenital defect, ascertained	10·5	26·0	13·7	29·6
Pregnancy, Lactation, Parturition, and Puerperal state, Uterine and Ovarian disorders, Puberty, Change of life	.....	.....	14·0	15·7
Previous attacks	10·4	16·4	12·0	22·0
Unknown	25·8	18·4	18·4	15·8

Intemperance in drink is popularly supposed to be the most fruitful cause of insanity in the colonies, and although it does bear the highest proportion of known causes amongst males, it is not nearly so common a cause as in England. Amongst females, the chief causes of insanity in the colonies are pregnancy, &c. Hereditary influence and congenital defect, in England and Wales, bear the largest proportion of known causes, both amongst males and females, and it is believed they are responsible in New South Wales for many more than the number shown in the table, and that of the unknown causes the great majority should be ascribed to hereditary influences. The small proportion of cases set down to these two causes is simply due to the difficulty of obtaining knowledge of the family history of a large number of the people in Australasia.

HABITATIONS.

The latest information available concerning the habitations of the people, is that obtained at the census of 1891, when inquiry was made on the householders' schedules respecting the dwellings of the population. The information sought was in respect to whether a building was occupied, unoccupied, or in course of construction; the material of which it was built, and the number of rooms which it contained. The tabulation was not made with the same degree of completeness in all the colonies; but as far as comparative figures can be given they are shown below:—

Class of Dwelling.	New South Wales.	Victoria	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Occupied	197,408	217,895	78,429	59,834	10,221	26,585	119,766
Unoccupied	16,166	15,846	2,224	3,818	236	1,588	9,558
Being built	1,255	1,693	44	235	73	189	425
Stores, offices, and public buildings	8,368	264	*	*	*	244	*
Inhabited huts and dwellings with canvas roofs	18,794	5,862	*	*	*	1,195	4,085
Total	241,991	241,560	80,697	63,387	10,530	29,801	133,834

* Included under more general heading.

The materials of which the dwellings in each colony were constructed are shown in the following table, as far as the particulars are available:—

Material.	New South Wales.	Victoria	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Brick or stone	90,456	69,545	....	50,723	6,087	8,452	5,697
Wood, iron, or lath and plaster	130,363	154,843	....	11,519	2,388	19,231	116,801
Slabs, bark, mud, &c	*	4,841	....	*	306	595	4,286
Canvas, linen, calico, &c.	18,794	5,858	....	889	1,552	1,214	4,085
Other materials	....	....	....	*	3	....	1,551
Unspecified materials	2,378	6,473	....	756	194	309	1,414
Total	241,991	241,560	80,697	63,887	10,530	29,801	133,834

* Included in previous line.

The number of rooms is given below for all houses, whether occupied or unoccupied, except in the case of New South Wales and New Zealand, where the figures given refer only to occupied dwellings :—

Dwellings, with—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
One room	24,876	28,497	....	1,948	2,075	2,469	11,528
Two rooms	16,137		....	7,397	1,612	4,092	11,030
Three and four rooms	65,920	156,976	....	28,256	2,855	11,627	41,934
Five and six rooms	64,342		....	15,911	1,440	5,880	32,868
Seven to ten rooms	32,275	36,944	....	9,614	1,856	5,413	24,968
Eleven to fifteen rooms	7,371	7,061	....		318		
Sixteen to twenty rooms	1,912	1,673	....		92		
More than twenty rooms	1,160	1,226	....		47		
Number of rooms unspecified	1,947	9,183	....	761	235	320	1,523
Total	215,940	241,560	80,697	63,887	10,530	29,801	123,851

In Queensland the habitations were enumerated under the Quinquennial Census Act, which does not provide for a statement either of the materials of which houses are constructed or of the number of rooms which they contain. From the foregoing figures it will be seen that in Australasia there are nearly $5\frac{1}{4}$ persons to every occupied house.

EDUCATION.

IT would have been strange if communities so prosperous as the Australasian colonies had neglected to provide for the education of the children. This duty, so vitally affecting the welfare of the people, has been recognised as one of the most important which the State could be called upon to discharge. In every province of the group, ample provision has been made for public instruction—such provision, indeed, in some cases, extending far beyond what has been done in most of the countries of the old world. In addition to a system of primary education, in all the colonies there are grammar and high schools, by means of which those who have the desire may qualify for the higher studies of the University. So bountiful is the provision made by the State that in most cases the cost of education is merely nominal, and the poverty of the parents ceases to be an excuse for the ignorance of the children. It is true that in the very early days of colonisation but little attention was paid to education; but as soon as the sharp struggle for bare existence was over, attempts were made to provide means of instruction for the rising generation, and the foundations were laid of an educational system that is in the highest degree creditable to these young communities. The religious bodies were naturally the first to build schools and provide teachers; but there was always a large proportion of persons who objected to denominationalism, principally those who belonged to denominations which were not subsidised by the State; hence there arose a National or non-sectarian system, which has in the course of time almost monopolised the educational field.

In all the Australasian colonies the State system of education is secular. Compulsory clauses find a place in the Acts of the various provinces; but the enforcement of these is not everywhere equally strict. In Victoria, for example, compulsory attendance at school has been rigorously insisted upon, while in Queensland the principle of compulsion has been allowed to remain almost in abeyance, and in the other colonies it has been enforced with varying degrees of strictness. In Victoria, Queensland, New Zealand, Western Australia, and South Australia the primary education provided by the State is entirely free of charge to the parents; in New South Wales and Tasmania small fees are charged, but these are not enforced where the parents can reasonably plead poverty.

The statutory school-age of each colony is as follows :—

New South Wales	over 6	and under	14	years.
Victoria	,, 6	,,	13	,,
Queensland	,, 6	,,	12	,,
South Australia	,, 7	,,	13	,,
Western Australia	,, 6	,,	14	,,
Tasmania	,, 7	,,	13	,,
New Zealand.....	,, 7	,,	13	,,

In New South Wales, for many years, a dual system of education was in existence. The four State-aided denominations—the Church of England, Roman Catholic, Presbyterian, and Wesleyan bodies—had schools supported by annual votes from Parliament, administered under the control of the head of each denomination for the time being. There were also National schools, likewise supported by the State, but under the control of a Board appointed by the Government. This plan was found to be costly and wasteful in the extreme, for in many country towns there were in existance several small and inefficient competing schools where the total number of children was not more than sufficient for one well conducted establishment. So strongly was this evil felt that changes in the law were made from time to time, until at length the denominational system was abolished altogether, and one general and comprehensive plan of Public Instruction adopted in its place. This reform was not accomplished without much agitation, extending over a considerable period. A league was formed with the object of securing the establishment of secular, compulsory, and free education, and in 1880, under the auspices of Sir Henry Parkes, the measure establishing the present system became law. Education in the public schools is now non-sectarian, though facilities are afforded to clergymen to give religious instruction within specified school-hours to children whose parents belong to their denomination and desire that this instruction shall be given. It is compulsory, and free to all who cannot afford to pay, while a merely nominal fee is charged to those who are in a position to contribute towards the cost of the teaching of their children. For secondary education there are a number of superior and high schools entirely supported by the State, besides numerous colleges, grammar schools, and denominational schools which obtain no assistance from the Government, excepting the Sydney Grammar School, which receives a statutory endowment of £1,500. Scholarships and bursaries have been founded in connection with many of these schools. The University of Sydney, which is liberally endowed by private individuals as well as by the State, grants degrees which rank with those of Oxford and Cambridge. Educational affairs in the colony are under the direction of a Minister for Public Instruction.

In Victoria, under an Act passed in 1872, a system of free, compulsory, and secular primary education is in force, under a Minister of Public Instruction, who is responsible to Parliament. The compulsory clause is very strictly enforced, especially in the large towns, and education is entirely free as regards the ordinary subjects of primary instruction, while the teachers are allowed to impart instruction in

additional subjects, for which a small fee is payable. The teaching of religion is strictly forbidden during school-hours, and at no time must a State teacher give religious instruction. Secondary education is almost entirely in the hands of private or denominational establishments. The higher education is supplied by the University, with its affiliated colleges.

The Education Department in Queensland is administered by the Secretary for Public Instruction. The Act now in force was passed in 1875, and is of a tolerably liberal character, primary education being secular and free. An Amendment Act came into operation in 1898, extending the range of subjects taught in State schools and reducing the number taught in the Provisional schools. The compulsory clause has not been put into operation, as it would be a very difficult thing to enforce its provisions in the scattered and sparsely-populated districts of the interior. The public schools are divided into two classes, termed State and Provisional schools. A State school must have an average daily attendance of not less than thirty children, and the local district must contribute one-fifth of the cost of establishing, maintaining, repairing, and making additions to the building. In 1899, Provisional schools which had previously received a subsidy not exceeding £50 for any single school, and not more than half the cost of new buildings and furniture, were placed on the same footing with regard to Government grants as the State schools. Secondary education is provided by grammar schools, which are liberally assisted by the State. The colony has no University of its own, but sends a fair number of students to the Universities of Sydney and Melbourne. The system of extension lectures in connection with the University of Sydney has been extended to Queensland; and the Government is at present considering a Bill, having for its object the establishment of a University in Brisbane.

The South Australian system of primary education, which was introduced in its present form in 1878, is very similar to the systems already described. Public instruction in the colony is presided over by a responsible Minister, with an Inspector-General and other officials. It is compulsory, secular, and free. Until the end of 1891 a small weekly fee was payable by all parents able to do so; but at the beginning of 1892 primary instruction was made free until the scholar reached the age of 13 years or had been educated to the compulsory standard, and in 1898 the remaining fees were abolished by the Minister for Education. Children who have attained a certain standard of education are exempt from compulsory attendance. Religious instruction is not allowed except out of ordinary school-hours. Secondary education is in the hands of private and denominational establishments; and the University of Adelaide, though small, is efficient.

Under the Elementary Education Act of 1871, primary education in Western Australia is imparted in Government schools, which are entirely supported by the State. An Amendment Act passed in 1893 placed educational affairs in the colony under the control of a responsible Minister, and afforded facilities for special religious teaching, half-an-hour

per day being allotted to clergymen for the instruction of children of the same denomination. Another Amendment Act which came into force in 1894 abolished payment by results, and gave powers for the enforcement of compulsory attendance. Until 1895, private schools were also assisted from the public purse, on condition of submitting to Government inspection in secular subjects ; but towards the end of that year an Act was passed abolishing the system of annual grants to denominational schools, and providing that during the year 1896 the State should hand over, as compensation for the abolition of these subsidies, the sum of £15,000, to be divided between the schools in like proportions to those which governed the distribution of the annual vote in 1895. Under the regulations of 1895, children were entitled to free education on account of inability to pay the fees, of living more than 1 mile from school, of having made 400 half-day attendances in the previous year, or of other reasons approved by the Minister, but the Education Act which came into operation in 1899 gave free education to all children of compulsory school age. There is a high school at Perth, which is subsidised by the State; and further encouragement is given to secondary instruction by the institution of scholarships which are open to competition.

In Tasmania the Treasurer holds the portfolio of Education, and has especial charge of matters relating to primary instruction. The permanent head of the department is styled Director of Education. There are public schools in every country town throughout the colony, and several in Hobart and Launceston. The principle of compulsion is in force in these two towns ; and special religious instruction is given by the Church of England clergy out of school-hours. Secondary education was at one time encouraged by exhibitions, but none have been granted since 1893. The University of Tasmania was established in 1890, and at first was merely an examining body, but in the beginning of the year 1893 a building was acquired and teaching provided for the purpose of enabling students to graduate in Arts, Science, and Laws. The first degree, one of B.A., was taken in 1894. The Government grants the institution an annual subsidy, the amount voted by Parliament in 1899 being £3,200.

Education at the public schools of New Zealand is free (except that at such as are also district high schools fees are charged for instruction in the higher branches) and purely secular. The attendance of all children between the ages of 6 and 13 years is compulsory, except in cases where special exemptions have been granted. There is a separate Department of Education, presided over by one of the responsible Ministers of the Crown, as in the other colonies. The whole colony has been divided into school districts, each presided over by a local Board, and a capitation grant of £3 15s. per head is paid by the State for every child in average attendance, and, in addition, 1s. 6d. per child in support of scholarships, with other grants for school-buildings, training of teachers, etc. In districts where there are few

or no Europeans, native schools are maintained for the Maori children. High schools, colleges, and grammar schools provide the means for acquiring secondary education ; and the University of New Zealand, like those of the other colonies, is empowered to confer the same degrees as the Universities of Oxford and Cambridge, except as regards Divinity. It is, however, only an examining body, the undergraduates keeping their terms at the affiliated colleges—the University of Otago, the Canterbury College, the Auckland University College, and the Victoria College at Wellington.

State Schools.

Exclusive of the native schools established by the New Zealand Government for the instruction of the Maori children, there were 8,303 public schools in Australasia at the close of the year 1899. The number in operation in each of the seven colonies will be seen on reference to the table given below. As a rule, secondary education is provided by private institutions, and the figures quoted may be taken as representing primary schools ; but in New South Wales there are five high schools, which it is customary to include with the others. The secondary schools in New Zealand are excluded from the returns :—

State.	State Schools.	Teachers employed, exclusive of Sewing Mistresses.		
		Males.	Females.	Total.
New South Wales	2,693	2,586	2,191	4,777
Victoria	1,892	1,860	2,519	4,379
Queensland	884	928	1,033	1,961
South Australia	677	411	853	1,264
Western Australia	207	176	257	433
Tasmania	305	219	366	585
Commonwealth	6,658	6,180	7,219	13,399
New Zealand	1,645	1,451	2,164	3,615
Australasia	8,303	7,631	9,383	17,014

In all the colonies, with the exception of Victoria, there has been a steady increase in the number of State schools during the past few years. In Victoria the reverse has been the case, for since 1891 the number in operation has decreased from 2,233 to 1,892. This is the result of a scheme of retrenchment, initiated at that time, by which there has been an amalgamation of schools in large centres of population ; and in other districts schools have been closed and the pupils conveyed to other institutions at the cost of the State. Under the first part of this scheme no fewer than 84 schools have been converted into

adjuncts to others in the neighbourhood. At these adjuncts—which are not included in the number of schools set down in the table—instruction is now imparted only to young children, in junior classes. The system of conveyance, brought into operation under the second part of the scheme, has been the means of closing 270 schools, an allowance being made by the State to parents to defray the cost of conveyance of their children to schools further removed from their place of abode. Notwithstanding the reduction in the number of schools during the past five years, consequent on the above retrenchment policy, the increased proportion of average attendance shows that educational facilities are well distributed.

The 884 schools in Queensland include 412 State schools, 3 special schools, and 469 "provisional" schools. In compliance with a resolution of the Legislative Assembly, the last mentioned schools, which had previously been receiving a subsidy not exceeding £50, and not more than half the cost of new buildings and furniture, were placed on the same footing as State schools in regard to subsidy. By this step the State assumed the responsibility for four-fifths of the cost of building and equipment without limitation as to the amount. For Western Australia, the returns for years prior to 1896 included State-aided denominational schools. From these establishments the Government subsidy was withdrawn at the end of 1895, and thenceforth they were placed outside the sphere of the operations of the Education Department. This point should be borne in mind when comparing the figures with those given for previous years, otherwise the extension of public instruction in that colony would seem to be incommensurate with the growth of population. As a matter of fact, the progress has been rapid, and 42 new State schools were opened in 1899.

As shown in the previous table, the total number of teachers employed in the 8,303 State schools was 17,014—7,631 males and 9,383 females—exclusive of sewing-mistresses, of whom there were 60 in New South Wales, 429 in Victoria, 19 in South Australia, 40 in Western Australia, and 198 in New Zealand. New South Wales is the only colony where employment is afforded to a greater number of male teachers in comparison with females; in all the other provinces there is a large preponderance of female instructors. In most of the colonies provision is made for the training of teachers. In New South Wales, the Fort-street Training School for male students had 23 students in training in 1899, 15 of whom held full-scholarships, and 8 half-scholarships; while at the Hurlstone Training School for female students there were 24 students in residence, 11 of whom held full-scholarships, and 13 special scholarships. There were 21 students in the training college in South Australia. A scheme for the more efficient training of pupil-teachers has been arranged, under which, for the first two years of their course, pupil-teachers will not be required to teach, but will receive instruction at the Training College. For the third and fourth years they will engage in practical teaching, and may then be entered as students

at Adelaide University for a period of two years. In New Zealand, the Education Boards of North Canterbury and Otago have institutions for the training of teachers.

Enrolment at State Schools.

The gross enrolment of pupils at the State schools of Australasia during 1899 was 865,967; while the net enrolment, or the number of distinct children, came to 765,315, forming 17·19 per cent. of the mean population. In most of the colonies the net enrolment is obtained in an empirical manner—by deducting a certain proportion (about 12 per cent.) from the gross figures. The appended table gives the gross and net enrolment for each colony. During the last five years there has been an increase of 13·87 per cent. in the net enrolment at the State schools of Australasia. Of the individual colonies, the largest proportional increase has taken place in Western Australia, where, excluding the State-aided denominational schools, it reached 119 per cent. In Queensland the increase has been 42·40 per cent.; in New South Wales, 21·43 per cent.; and in Tasmania, 21·16 per cent. For South Australia, Victoria, and New Zealand, the respective increases were 5·62 per cent., 4·42 per cent., and 1·12 per cent.:—

State.	Gross Enrolment.	Net Enrolment.	
		Total.	Percentage of Population.
New South Wales	265,037	233,233	17·34
Victoria	239,732	214,522	18·45
Queensland	103,544	92,120	19·31
South Australia	68,329	62,316	16·94
Western Australia	16,053	14,127	8·33
Tasmania	23,272	17,682	9·84
Commonwealth	715,967	634,000	17·13
New Zealand	150,000	131,315	17·51
Australasia	865,967	765,315	17·19

It will be seen that the largest percentage of the population enrolled at State schools was to be found in Queensland, and the lowest in Western Australia. Such a comparison, however, is of very little value, because the proportion which the children of school age bear to the total population varies considerably in the different colonies, being as high as 25 per cent. in New Zealand, as compared with 21 per cent. in New South Wales and 19 per cent. in Victoria, while in Western Australia, which is still at its pioneer stage, there must of necessity be a much smaller percentage of dependent children than in the more widely settled colonies.

More important, perhaps, than the number of children enrolled is the average attendance. This, for scholars at the State schools during the year 1899, was 530,617, representing about 64 per school and 31 per teacher, and 11·92 per cent. of the population of Australasia. The figures for the individual colonies will be found appended :—

State.	Scholars in average attendance.			
	Total.	Per School.	Per Teacher.	Per-centage of popula-tion.
New South Wales	149,349	55	31	11·10
Victoria	143,844	76	33	12·38
Queensland	63,133	71	32	13·24
South Australia	41,655	62	33	11·32
Western Australia	12,465	60	29	7·35
Tasmania	13,105	43	22	7·29
Commonwealth.....	423,551	64	32	11·44
New Zealand.....	107,066	65	29	14·27
Australasia	530,617	64	31	11·92

According to the official returns, the proportion of the net enrolment of scholars in average attendance was highest in Western Australia, the percentage for which colony was 88·2. This was followed by New Zealand with 81·5 per cent., while Tasmania was third with 74·1 per cent. The percentage for Queensland was 68·5 ; for Victoria, 67·0 ; for South Australia, 66·8 ; and for New South Wales, 64·0. Comparing the first with the last year of the latest quinquennial period, it will be seen that all the colonies show increases in average attendance, with the exception of New Zealand, where there has been a slight decrease. The greatest increase was recorded in Western Australia, the total for 1899 being nearly three times larger than the corresponding figures for 1895. The percentage of the population of New Zealand—14·27—shown as in average attendance at the State schools, it must be remarked, is rather higher than it should be, on account of a number of Maori children attending the ordinary schools in districts where there are none established for the "natives," while the basis on which the proportion has been calculated is the population exclusive of aborigines. Still, when full allowance has been made on this score, the percentage is higher than is found in any other colony. The "Native" schools in New Zealand, of which the number was 84, had a teaching-staff of 148, exclusive of 11 sewing-mistresses, in 1899, with an enrolment of 3,065 and an average attendance of 2,435 scholars, and the expenditure on the schools during the year amounted to £23,031. Of the children who received instruction at these institutions, 80 per cent. were Maori, 10 per cent. were half-caste, and 10 per cent. were European or between half-caste and European.

Cost of Primary Education.

The official reports of the various colonies show that during the year 1899 the cost of administration and maintenance of the State schools of Australasia was £2,147,809, while the revenue from fees, rents, sales of books, etc., amounted to £111,587, leaving a net cost to the State of £2,036,222, excluding a sum of £253,435 expended on school premises. Assistance to private schools where primary or secondary education is given is not included in these figures. The expenditure for each of the colonies will be found below. In the case of New Zealand, the amounts given in the table represent the disbursements of the Education Boards, and not the actual capitation grant received from the Government during 1899, as the former figures more accurately represent the cost of the State schools for the twelve months. From the total cost to the State in that colony, the receipts from the Education Reserves, £40,804, have not been deducted, as the capitation grant is now reduced by an amount equivalent to the rents derived from these reserves, so that practically they are paid into the Consolidated Revenue. The figures do not give the whole expense to the State, as most of the principal teachers enjoy residences for which no rent charge is made. In the case of New South Wales, the annual value of these residences is £36,000 :—

State.	Expended on Administration and Maintenance.	Receipts from Fees, Rents, &c.	Net Cost to State, excluding Premises.	Expended on School Premises.
	£	£	£	£
New South Wales	646,154	78,358	567,796	90,926
Victoria*	629,959	11,897	618,062	44,685
Queensland	208,029	.....	208,029	28,390
South Australia	139,082	11,777	127,905	16,311
Western Australia	49,145	1,980	47,165	12,679
Tasmania	37,516	1,257	36,259	3,695
Commonwealth	1,710,485	105,269	1,605,216	196,686
New Zealand	437,324	6,318	431,006	56,749
Australasia	2,147,809	111,587	2,036,222	253,435

* Year ending 30th June, 1900.

In the colonies of Victoria, Queensland, South Australia, Western Australia, and New Zealand, primary education is free; in the other two colonies a small fee is charged, but, as will be seen from the table, the revenue derived from this source is very small in Tasmania. In New South Wales the fee charged is 3d. per week for each child, the

sum payable by one family being limited to one shilling; and the receipts amount to a considerable sum annually, totalling £78,358 in 1899. Free education is, of course, given to those children whose parents cannot afford to pay for them, and the number of children so treated during last year was 34,476—equal to 14·78 per cent. of the gross enrolment of distinct pupils. In Tasmania, the teachers are allowed to retain the bulk of the fees collected, their salaries being fixed accordingly. Thus, in 1899, the fees amounted to £10,948, of which the Government took £1,257, as shown above, and the teachers retained the balance of £9,691. In the smaller schools the fees go wholly to the teacher, and in the larger the State takes a small share where the amount received is moderate, but a more substantial part where the fees amount to hundreds per annum. Free education is, as in New South Wales, granted in cases of necessity, and for this purpose free public schools were established in Hobart and Launceston; but as it was considered that this system affixed a brand of pauperism to the children making use of them, they have now been abolished, and the pupils find free education at the ordinary schools. The average number of free scholars on the quarterly rolls for 1899 was 2,512. In 1899 an Education Act was passed in Western Australia, which had for its chief object the granting of free education to all children of compulsory school age. The work of compulsion was also systematised, and the returns for 1899 show the highest percentage of attendance for any year since 1870.

Although primary instruction is free in Victoria, South Australia, Western Australia, and New Zealand, yet Queensland is the only colony where no fees were received in 1899; but, as pointed out on a previous page, the State receives contributions from local districts towards the construction of school buildings, the amount of such contributions in 1899 being £5,585. In Victoria fees are charged for instruction in extra subjects, such as book-keeping, shorthand, algebra, Euclid, French, Latin, Science, &c. During last year extra subjects were taught in 117 schools, and the fees collected represent £2,286 of the sum of £11,897 shown above, the balance, consisting of £9,611, being made up of fines, rents, and the amount realised by the sale of publications; and although not directly applied by the State towards the reduction of departmental expenditure, has been so treated here. In South Australia the receipts during 1899 included £6,067 from rents, £3,898 from sale of books and school material, and the fees from the Advanced School for Girls amounted in 1899 to £1,307. The receipts of £6,318 in New Zealand were made up of fees, donations, rents, sales, etc., received by the Education Boards, and represent the whole local contributions.

It will be seen from the above table that, excluding the expenditure on school premises, the net cost of public instruction in Australasia in 1899 was £2,036,222. This is equivalent to £3 16s. 9d. for each child in average attendance during the year; while, if the expenditure on

buildings is taken into account, the amount reaches £4 6s. 4d. per child. The figures for each of the seven colonies are presented below:—

State.	Net Cost to State, per scholar in average attendance.	
	Excluding School Premises.	Including School Premises.
	£ s. d.	£ s. d.
New South Wales	3 16 0	4 8 2
Victoria	4 5 11	4 12 0
Queensland	3 5 11	3 14 11
South Australia	3 1 5	3 9 3
Western Australia	3 15 8	4 16 0
Tasmania	2 15 4	3 1 0
Commonwealth	3 15 10	4 5 1
New Zealand	4 0 6	4 11 1
Australasia	3 16 9	4 6 4

In the matter of expenditure per child in average attendance, New South Wales now occupies a medium position, although a few years ago the cost of public instruction in that colony was higher than in any of the other provinces. Careful retrenchment has been effected in the department, without impairing the efficiency of the service. With the exception of New Zealand, where a diminished average attendance caused an increase of 8s. 10d., all the colonies show a reduction in expenditure on administration and maintenance per child in average attendance as compared with the figures for 1894. For New South Wales the decrease amounted to 3s. 5d. per scholar; for Victoria, to 7s. 10d.; for Queensland, to 16s. 7d.; for South Australia, to 12s. 11d.; for Western Australia, to 13s. 1d.; and for Tasmania, to 6s. 5d.

Encouragement of Secondary Education.

Before passing to the consideration of private schools, reference may be made to the encouragement of secondary education by the State, apart from grants to the Universities. In New South Wales there are numerous private colleges of a high class, but the only one now receiving assistance from the Government is the Sydney Grammar School, which has a statutory endowment of £1,500 per annum. There are, however, five State High Schools in the colony—two for boys and three for girls—where higher education may be obtained at a moderate cost; as well as 102 Superior Schools, in the higher classes of which pupils are prepared for the public examinations. In 1899 the expenditure on the High Schools amounted to £5,779. Of the High School pupils, 72 secured

passes at the junior and 11 at the senior examinations, while 44 qualified for matriculation; and 4 senior and 216 junior passes were secured by the Superior Schools. A scheme of scholarships for the Sydney Grammar School, for High and Superior Schools, and for the University, is in existence. In 1899, 105 candidates were successful at these examinations. Fifty secured scholarships and 40 bursaries for High and Superior Schools; 5, bursaries at the Sydney Grammar School; and 10, University bursaries.

In Victoria, as previously pointed out, extra subjects are taught for a small fee at 117 of the public schools. For the encouragement of secondary education, 200 scholarships were granted from 1886 to 1890, but in 1891 the number was reduced to 100, and in 1892 to 75. Consequent on the retrenchment policy already alluded to, these scholarships were abolished in 1893, but the principals of private colleges offered a large number of exhibitions to children attending State schools. The Department has, however, decided to introduce paid scholarships similar to those withdrawn in 1893; and under the new scheme, 60 exhibitions of the annual value of £10 will be awarded, the first examination to be held in December, 1900. There were 146 scholarships awarded in 1899 to State school pupils by principals of the various secondary schools. The Department annually bestows a number of exhibitions to the University on pupils who have gained scholarships at secondary schools. At the examinations for these exhibitions, held in January, 1900, 20 candidates were successful. There are at present 56 exhibitions.

Steps have recently been taken in Queensland to add to the curriculum of the State schools, in order that they may be brought more into line with the superior public schools of New South Wales. Secondary education, however, has long been provided for by the liberal endowment of the private grammar schools, and by a system of scholarships for these schools, which at present number ten. Each is subsidised to the extent of £1,000 annually; and the total amount of endowments and grants by the State to these institutions to the end of 1899 was £256,535. At the annual examinations for scholarships, 27 boys and 9 girls were successful, while bursaries were gained by 6 boys and 2 girls. In the last quarter of 1899 there were altogether 160 State scholars in attendance at the various grammar schools. There were 3 exhibitions granted in 1899, one of them being obtained by a girl. Of the 66 exhibitions granted since the year 1878, when they were first instituted, 49 have been gained by students who had previously won scholarships from State schools.

In South Australia the Advanced School for Girls was attended by 99 pupils in 1899. The fees amounted to £1,307, and the expenditure to £1,190, so that there was a profit on the year's transactions of £117. There are twelve bursaries for this school annually awarded to State school pupils. Scholarships to public schools, twelve in number, are also awarded annually by the State, as well as nine University scholarships,

namely, three entrance scholarships, three first-year undergraduate scholarships, and three second-year undergraduate scholarships. In Western Australia there is a high school for boys at Perth, which is subsidised by the Government to the amount of £1,250 annually. In 1899 the number of pupils on the roll, including boarders, was 83, and the average daily attendance was 69. Two State scholarships for this school, valued at £75 each and tenable for three years, are awarded annually. The Government also offers annually ten bursaries of the value of £10 to children attending the elementary schools of the colony—five to boys, and five to girls. In Tasmania a system of exhibitions was at one time in force, but none have been granted since 1893. New Zealand has 25 incorporated or endowed secondary schools, with a regular teaching staff of 145, and a visiting staff of 51. At the end of 1899 there were 2,723 pupils on the rolls, of whom all but 153 were over 12 years of age. For that year the receipts amounted to £50,289, including £22,559 derived from interest on investments and rents of reserves, and £24,713 from fees. These schools, it should be noted, are not supported directly by the State. Some have endowments of land, and others receive aid from the rents derived from the Education Reserves administered by the School Commissioners.

Private Schools.

At the end of 1899 there were 3,006 private schools in Australasia, with a total teaching staff estimated at 9,316. The total number of pupils on the rolls was 164,528, and the average attendance, 130,374. Below will be found the figures for the individual colonies. At the end of 1895, the Government subsidy was withdrawn from the assisted schools in Western Australia, and, thenceforward, information respecting these institutions is incorporated in the returns for private schools :—

State.	Schools.	Teachers.	Enrolment.		Average Attendance.
			Total.	Percentage of Population.	
New South Wales...	1,053	3,407	60,159	4·48	47,560
Victoria.....	901	2,703	48,521	4·18	35,232
Queensland	176	646	14,166	2·97	12,118
South Australia ...	241	741	11,627	3·16	10,120
Western Australia	83	281	5,812	3·43	4,359
Tasmania	245	735	8,948	4·98	7,820
Commonwealth	2,699	8,513	149,233	4·03	117,209
New Zealand	307	803	15,295	2·04	13,165
Australasia ...	3,006	9,316	164,528	3·70	130,374

In New South Wales there has been a large increase in private schools during the past five years. Since 1894 the number of schools has increased from 863 to 1,053, and the enrolment from 51,016 to 60,159. Of the private schools in the colony, 318 are Roman Catholic, as compared with 69 connected with the other Churches, while 666 are undenominational; but of the scholars enrolled, more than three-fifths—39,649—are in attendance at Roman Catholic schools, while 4,245 attend Church of England schools; 1,237, schools belonging to other denominations; and 15,028, the undenominational schools. Since 1894 the pupils of the Roman Catholic schools have increased by 13 per cent., which is about 5 per cent. less than the general rate of increase. Many of these private schools are institutions of a high class. Only one—the Sydney Grammar School—is assisted by the State, which provides a statutory endowment of £1,500 per annum. In 1899 the staff of this school consisted of 21teachers; the total enrolment was 590; the average enrolment, 508; and the average daily attendance, 484. The receipts for the year totalled £10,196, of which £8,562 represented fees; while the expenditure was £9,338.

From returns furnished by the principals of private schools in Victoria, it appears that the total number of institutions has increased from 872 in 1894 to 901 at the end of 1899, while the gross enrolment increased from 44,038 to 52,318 during the same period. In this colony the principals of a number of the private colleges have granted scholarships at their institutions to State school pupils since the Government retrenched in this respect. These colleges are not subsidised by the State.

Of the 176 private schools in Queensland, the principal are the ten grammar schools, which are situated at Brisbane, Ipswich, Maryborough, Rockhampton, Townsville, and Toowoomba. In each of the first four towns there are two schools—one for girls and one for boys. In 1899 the teaching staff of the grammar schools consisted of 54 permanent and 20 visiting teachers; the aggregate number of pupils on the rolls was 879; and the average daily attendance, 729. As previously mentioned, each of the ten schools receives an annual grant of £1,000 from the State. During 1899 the total receipts amounted to £25,470, and the expenditure to £25,225, of which salaries and capitation fees absorbed £15,464.

There is no special information available with respect to the private schools in South Australia. In Western Australia the principal private institution is the Perth High School for Boys, which, in 1898, received a subsidy of £1,250 from the Government. The school is under the supervision of a Board of Governors. In 1899 the teaching staff numbered 4; the total number of pupils enrolled was 83, of whom 15 were boarders; and the average daily attendance was 69. The receipts for the year amounted to £2,582, and the expenditure to £2,486.

Included with the 245 private schools in Tasmania are 20 grammar schools and colleges, 9 of which are undenominational in character,

6 are connected with the Church of England, 3 with the Roman Catholic Church, 1 with the Wesleyan Church, and 1 with the Society of Friends. There were 123 permanent teachers at these institutions in 1898, and accommodation was provided for 2,633 students. The average attendance during the year was 2,029, of whom 469 were of the age of 15 years and upwards. As in New South Wales, the majority of the pupils at private institutions in New Zealand are enrolled at the Roman Catholic Schools. In 1898 the number of schools belonging to this denomination was 124, at which 10,175 scholars were enrolled, with an average daily attendance of 8,729.

Diffusion of Education.

It will be seen that the Governments of the various states have done much for the instruction of the children, and throughout Australia and New Zealand attendance at school of children of certain ages is compulsory. Unfortunately, in spite of the law and in spite of the educational facilities afforded by the states, large numbers of children are growing up in total ignorance, and a large number with very little instruction. It must not be supposed that the officials of the public departments controlling the instruction of children are to blame for this lamentable state of affairs ; on the contrary, they have made, and continue to make, protests against the continuance of the evil, but the rescuing of children from the neglect of parents, and the effects of their own depraved inclinations, does not seem to appeal very strongly to the legislatures of these colonies.

As regards New South Wales, it is estimated that there are 255,000 children of school age, that is 6 and under 14 years ; of these 223,000 were on the roll of some school or other, and as about 13,000 children are alleged to be receiving instruction at home, the satisfactory total of 236,000 would, at first sight, appear to be under instruction. When the returns are subject to scrutiny, however, a far from satisfactory condition of affairs is revealed. There are 177,600 children of school age attending public schools, and of these only 132,600 attend school seventy days in each half year ; attending private schools there are 45,300 children of school age, and of these 36,300 are believed to attend with regularity. These figures give a total of 168,900, and if to this number be added 9,000 who are being regularly educated at home, out of 13,000 nominally receiving instruction, the total number of children of school age regularly receiving instruction may be set down at 177,900. But there are, in addition, other children of school age who have received from the Department of Public Instruction certificates to the effect that they have attained the standard of education entitling them to exemption from school attendance, and most of whom no longer

attend school. Adding these to the figures just arrived at, gives a total of 187,900 children of school age who are being regularly instructed, or who have received the minimum instruction required by law. It would, therefore, appear that 67,100 children are not being properly instructed. Investigations show that of this number 35,000 are attending school, but only for a day or two a week; the number of children, therefore, who ought to be attending school, but who are not receiving any instruction whatever, may be set down at 32,000. Some of the latter are not absolutely illiterate—perhaps the majority of them; they have attended school at some period, and can read and write a little, but in respect to all of them, and to a large proportion of the 35,000 nominally receiving instruction, the intentions of the Public Instruction Act are defeated.

In Victoria, the school ages are from 6 to 12 years, both inclusive, and a careful estimate shows that the number of children of school age in 1899 was 200,000. There were 165,224 children of these ages on the roll of State schools, and 34,562 on the roll of private schools, making a total of 199,786. If these figures represented the true facts of the case, they would be eminently satisfactory, as it would appear as if every child in Victoria were being educated, but a little examination reveals a very different condition of affairs. In State schools there were 114,974 children in regular attendance, and 2,740 who, though attending school irregularly, held certificates to the effect that they were educated up to the requirements of the law, while there were also some 10,600 who, though younger than 13 years and not attending school, had obtained these certificates. These figures give a total of 128,314. It will probably be admitted that the proportion of children in attendance at private schools, compared with the number on the school rolls, is not greater than in the State schools. Assuming the proportions to be the same, of the 34,562 children 6 and under 13 years of age enrolled at private schools, 24,200 may be considered as being regularly instructed. Adding these figures to the result for the State schools, the total number of children of school age who are being regularly instructed in State or private schools, or have already reached the required standard, may be set down at 152,514, and the number not being instructed in the schools of the colony at 47,486. At the census of 1891, 5,612 children of school ages were being taught at home, and if 7,000 be taken as the present number of such children, it would appear that there are 40,486 children not being taught at home, or in regular attendance at State schools. According to the departmental report, there were 22,013 children excused from regular attendance on reasonable grounds, and possibly some of the children not accounted for (18,473) were in receipt of some sort of instruction; but when every allowance is made, it will be found that even in Victoria, where the State has offered so many inducements for the children to attend school, and spent money so liberally, there is a large number growing up in black ignorance.

The number of children of school age in South Australia is estimated at 51,800—of these 30,908 attended the State schools for at least thirty-five days per quarter, and 4,060 may be assumed to have attended regularly at private schools, making a total of 34,968 children being regularly instructed at school. To these must be added 3,600 receiving instruction at home, so that the full number of children of school age being regularly instructed is 38,568, leaving 13,232 not being properly instructed. The Education Department of South Australia accounts for 4,130 of these children as having given satisfactory reasons for not attending school, and many of the others are too far removed from schools to attend regularly, or to attend at all; but, granting the satisfactory character of the excuses offered, the fact remains that, as in New South Wales and Victoria, a large number of children of school age are not being regularly instructed.

With regard to the other States, no definite information is procurable, but doubtless it would be found that there is great room for improvement with respect to the attendance at school of children of the compulsory ages.

The number of children attending school in various years since 1861 was as follows:—

1861	130,060
1871	312,130
1881	670,776
1891	803,800
1899	929,843

From 1861 to 1899 the children of school age increased by over 300 per cent., but the number of children in attendance at school increased by no less than 615 per cent. during the same period.

University Education.

The advance of education is hardly more clearly indicated by the institution and success of Colleges and Universities than is the progress of wealth or the attainment of leisure. In Australia the earliest attempts to provide for what may be termed the luxuries of education were made in New South Wales in 1852, and in Victoria in 1855, when the Universities of Sydney and Melbourne respectively were established. No other colony of Australasia was at that time sufficiently advanced in wealth and population to follow the example thus set; but New Zealand in 1870, South Australia in 1874, and Tasmania in 1890, each founded a University. In all cases the Universities are in part supported by grants from the public funds, and in part by private endowments and the fees paid by students.

The Government endowment, lecture fees, and income from other sources, received by the Sydney, Melbourne, Adelaide, and Tasmanian Universities in 1899, were as follow :—

University.	Government Endowment.	Lecture Fees.	Other Sources.	Total.
	£	£	£	£
Sydney	11,267	8,591	14,609	34,467
*Melbourne	12,750	15,171	728	28,649
Adelaide	6,539	6,597	5,360	18,496
Tasmania	3,200	554	65	3,819

* Year 1898.

In addition to the above annual endowment, the Adelaide University has received a perpetual endowment of 50,000 acres of land from the Government of South Australia. The University of New Zealand has a statutory grant of £3,000 a year from Government, and an additional income of about £2,500 from degree and examination fees. Of the affiliated colleges, Auckland University College is in receipt of a statutory grant of £4,000 a year from Government. The University of Otago derives a sum of about £5,500 annually from rents of reserves.

The number of students attending lectures in 1899 is shown below. In New Zealand the students keep their terms principally at the University of Otago, the Canterbury College, the Victoria College, and the Auckland University College.

University.	Students attending Lectures.		
	Matriculated.	Not Matriculated.	Total.
Sydney	482	37	519
Melbourne	539	152	691
Adelaide	103	208	311
New Zealand	448	219	667
Tasmania	25	10	35
Total	1,597	626	2,223

Attached to the University of Sydney there are three denominational colleges for male students, and a fourth, undenominational in character, for female students. In Melbourne there are three affiliated denominational colleges, one of which contains a hall for the accommodation of female students. In Adelaide and Hobart there are no affiliated colleges attached to the University; and in New Zealand the University itself is an examining and not a teaching body,

the students keeping their terms at three undenominational colleges at Dunedin, Christchurch, and Auckland, besides several smaller institutions which have supplied a few graduates.

The Australasian Universities are empowered to grant the same degrees as the British Universities, with the exception of degrees in Divinity. In all the Universities women have now been admitted to the corporate privileges extended to male students; and at the Sydney, Melbourne, and Adelaide Universities this includes qualifying for degrees in medicine.

The number of degrees conferred by the five Universities, including those bestowed on graduates admitted *ad eundem gradum*, is as follows:—

Sydney	1,755
Melbourne	2,758
Adelaide	456
New Zealand	766
Tasmania	149

and there are over 1,500 students qualifying for degrees at the present time.

Technical Education.

Technical instruction is given in nearly all the capital cities of the Australasian colonies, as well as in many other parts of the country, and there is every probability that instruction in such matters will before long be still further extended. The State expenditure on this important branch of education in six colonies will be found below; similar information for South Australia is not available:—

	£
New South Wales	27,896
Victoria	24,740
Queensland	7,684
Western Australia	397
*Tasmania	1,238
New Zealand	4,637

* Year 1898.

In New South Wales, during the year 1878, a sum of £2,000 was granted by Parliament towards the organisation of a Technical College, and for five years the work of the institution was carried on in connection with the Sydney School of Arts. In 1883, however, a Board was appointed by the Government to take over its management, and the Technical College thenceforth became a State institution. Towards the end of 1889 the Board was dissolved, and the institution came under the direct control of the Minister of Public Instruction. The College, which, with the Technological Museum, is housed in a fine building at Ultimo, Sydney, is open to both male and female students. Branch technical schools have been established in the suburbs of Sydney and in many of the country districts, and technical instruction is also given in some of the public schools. In 1899 there were 250 technical classes in operation, of which 110 were held in Sydney and suburbs, 118 in the

country districts, and 22 in connection with the public schools. The enrolment at these classes was 10,256, namely, 5,896 in Sydney and suburbs, 2,706 in the country districts, and 1,654 at the public schools. The number of individual students under instruction during the year was 7,647. In 1896 a Technical College was opened at Newcastle, and a new College at Bathurst in June, 1898. During the year the expenditure by the Government on technical education amounted to £27,896, of which £24,073 was expended on the Technical College and branch schools, and £3,823 on account of Technological Museums. Fees to the amount of £4,856 were received from the students.

Technical education in Victoria has extended rapidly, but while the Government of New South Wales has wholly borne the cost of this branch of instruction, that of Victoria has received great assistance from private munificence, the Hon. F. Ormond, M.L.C., having given £15,500 to assist in the establishment of a Working Men's College. At the end of 1899 there were 18 Schools of Mines and Technical Schools receiving aid from the State. The total State expenditure during the year was £24,740.

Technical education has well advanced in South Australia. The School of Design in Adelaide during 1899 had 451 students on the roll, and there were branch schools at Port Adelaide and Gawler with an enrolment of 31 and 58 students respectively. The School of Mines and Industries, founded in 1889, received Government aid in 1899 to the extent of £3,250, while the receipts from fees and sale of materials to students amounted to £2,815. Manual instruction is imparted in the public schools, and special instruction in agriculture is also given at various country centres.

In Queensland technical education has received great attention, and there are 20 technical colleges distributed amongst the chief towns. The State grants a subsidy of £ for £ of fees contributed by students. In 1899 the total payments of the State to these institutions amounted to £7,684. The total receipts of the Colleges during the year reached a sum of £16,258; and the expenditure was £15,988, of which salaries of teachers absorbed £8,995. The number of individual students receiving instruction was 3,817, namely, 2,110 males and 1,707 females. Statutory provision was made for providing technical instruction in mining by the passing of the School for Mines Act of 1894," but up to the present its provisions have not been availed of.

In Tasmania the foundations of new Technical Schools were laid in 1889 in Hobart, and there is a branch school in Launceston. The schools are under the direction of local Boards of Advice, the members of which act directly under the Minister in charge of education. The number of distinct students in 1898 was 416, of whom 124 were under tuition at Hobart, and 292 at Launceston. The State aid during the year was £1,238. In Western Australia the question of establishing a Technical College still remains in abeyance, but evening classes have been conducted with successful results. The total number of students

attending these classes in 1898 was 1,720, of whom 937 were males, and 783 females. The State expenditure during the year on technical education and manual training amounted to £397.

In New Zealand there is a School of Mines in connection with the University of Otago, and two other Schools of Mines in mining districts; a School of Engineering and Technical Science, in connection with the Canterbury College; and an Agricultural College at Canterbury. Under the Manual and Technical Elementary Instruction Act of 1895, State aid is granted to classes established for the purpose of imparting instruction in such branches of science and art as are encouraged by the Science and Art Department, South Kensington, and the City and Guilds of London Institute. Workshops have been established in connection with some of the public schools, and part of the school day may be given to elementary manual instruction. In connection with the South Kensington Museum and the City and Guilds Institute examinations, 812 passes were secured in 1898. For the financial year ended March, 1899, the expenditure on technical instruction was £4,637, of which £1,919 represented capitation allowances, while a sum of £2,718 was absorbed in special grants. At the three mining schools, the number of students is about 230. There are 41 students at the Canterbury Agricultural College, and 89 at the School of Engineering and Technical Science in connection with the Canterbury College.

General Education.

Striking evidence of the rapid progress made by these colonies in regard to education is afforded by a comparison of the educational status of the people as disclosed by the four census enumerations of 1861, 1871, 1881, and 1891. In those years the numbers who could read and write, read only, and who were unable to read were as follow:—

Degree of Education.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1861.								
Read and write	188,543	327,800	17,181	72,207	8,446	48,281	67,998	730,456
Read only	46,024	56,945	3,714	18,629	1,559	13,137	8,922	148,930
Cannot read	116,293	155,577	9,164	35,994	5,585	28,559	22,101	373,273
1871.								
Read and write	296,741	478,572	74,940	115,246	18,703	55,939	177,419	1,217,560
Read only	56,391	70,999	12,080	21,123	2,614	13,945	19,240	196,392
Cannot read	150,849	181,957	33,084	49,257	4,036	29,444	59,734	508,361
1881.								
Read and write	507,067	651,567	136,718	200,057	19,697	74,967	346,228	1,936,301
Read only	49,372	49,535	13,631	15,267	2,429	9,605	27,323	167,162
Cannot read	195,029	161,244	63,176	64,541	7,582	31,133	116,382	639,087
1891.								
Read and write	835,570	908,767	276,381	236,514	34,254	103,138	484,198	2,878,822
Read only	43,536	32,817	14,618	9,571	2,061	6,287	24,902	133,792
Cannot read	244,848	198,821	102,719	74,346	13,467	37,242	117,558	789,001

The figures in the preceding table refer to the total population, and the number of illiterates is therefore swollen by the inclusion of children under school-going age. If the population over 5 years of age be considered in comparison with the total population, the results for the whole of Australasia will be as follow:—

Degree of Education.	Whole Population.				Population over 5 years of age.			
	1861.	1871.	1881.	1891.	1861.	1871.	1881.	1891.
Read and write	730,456	1,217,560	1,936,301	2,878,822	730,339	1,130,145	1,936,111	2,878,813
Read only	148,930	196,392	167,162	133,792	143,908	190,545	161,295	128,445
Cannot read	373,273	508,361	639,087	789,001	168,929	285,286	243,583	262,515
Total	1,252,659	1,922,313	2,742,550	3,801,615	1,043,176	1,605,976	2,340,989	3,269,773

The following table affords a comparison of the number of each class in every 10,000 of the population for the same periods:—

Degree of Education.	Whole Population.				Population over 5 years of age.			
	1861.	1871.	1881.	1891.	1861.	1871.	1881.	1891.
Read and write	5,831	6,334	7,060	7,573	7,001	7,038	8,270	8,804
Read only	1,189	1,022	610	352	1,380	1,186	689	393
Cannot read	2,980	2,644	2,330	2,075	1,619	1,776	1,041	803
Total	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

It will be seen, therefore, that while in 1861 there were only 7,001 persons who could read and write out of every 10,000 people over 5 years of age, the number in 1891 had increased to 8,804, while those who were totally illiterate had in the same period decreased from 1,619 to 803.

Looking at the matter still more closely with reference to age, it will be seen that the improvement in education is most marked in the case of the rising generation. The following table shows the degree of education of all children between the ages of 5 and 15 years in 1861, 1871, 1881, and 1891, numerically and per 10,000:—

Degree of Education.	Total between 5 and 15 years.				Per 10,000 children.			
	1861.	1871.	1881.	1891.	1861.	1871.	1881.	1891.
Read and write	114,353	288,154	482,719	674,012	4,637	5,911	7,058	7,565
Read only	68,038	102,316	86,574	69,640	2,759	2,099	1,266	782
Cannot read	64,237	96,986	114,654	147,280	2,604	1,990	1,676	1,653
Total	246,628	487,456	683,947	890,932	10,000	10,000	10,000	10,000

The proportion of those able to read and write has, therefore, grown from 4,637 to 7,565 in every 10,000 children during the thirty years which the table covers, while the number of those able to read only in 1891 was not much over one-fourth of what it was in 1861, and the wholly illiterate had decreased by more than one-third during the period.

The Marriage Register affords further proof of the advance of education, and it has the further advantage of giving annual data, while the census figures are only available for decennial periods. The numbers of those who signed the Marriage Register by marks were as appended. Where a blank is shown the information is not available.

State.	1861.			1871.			1881.			1891.			1899.		
	Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.	
		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.
New South Wales..	3,222	596	989	3,953	573	768	6,284	347	525	8,457	273	248	9,275	150	113
Victoria	4,434	..	..	4,693	342	650	5,896	171	245	8,780	110	133	8,140	71	57
Queensland	320	..	..	970	..	..	1,703	84	169	2,905	88	109	3,449	57	74
South Australia ..	1,158	..	..	1,250	..	..	2,308	100	159	2,315	40	49	2,276	41	39
Western Australia.	149	..	..	159	..	..	197	..	..	413	..	..	1,671	15	22
Tasmania	717	..	..	598	..	..	856	..	..	988	..	..	1,147	39	40
New Zealand	878	..	..	1,864	..	..	3,279	105	190	3,805	53	64	5,461	24	35
Australasia	10,878	..	..	13,487	..	..	20,523	..	..	27,663	..	..	31,419	397	380

The percentages for those colonies for which the necessary information is available are worked out in the following table :—

Year.	Males.	Females.	Total.
1861	18·50	30·69	24·60
1871	10·58	16·40	13·49
1881	4·14	6·61	5·38
1891	2·12	2·27	2·20
1899	1·26	1·21	1·24

The percentage in 1899 was, therefore, less than one-twentieth that in 1861, and there is every reason to expect that in the course of another few years it will be still further diminished.

The wonderful increase which has taken place in the quantity of postal matter carried points indirectly to the spread of education. The following table shows that while in 1851 only 2,165,000 letters and

post-cards and 2,150,000 newspapers passed through the Australasian Post-offices, these numbers had in 1899 increased to 238,253,200 and 106,165,400 respectively :—

	Letters and Post-cards.	Newspapers.
1851	2,165,000	2,150,000
1861	14,061,000	10,941,400
1871	30,435,300	17,252,700
1881	80,791,700	43,802,000
1891	183,694,900	95,879,760
1899	238,253,200	106,165,400

The following are the numbers of letters and newspapers per head of population in each of the six years mentioned :—

	Letters per Inhabitant.	Newspapers per Inhabitant.
1851	4·7	4·7
1861	11·3	8·8
1871	15·7	8·9
1881	29·1	15·8
1891	47·9	25·0
1899	53·5	23·8

In 1899 the number of letters per inhabitant was over eleven times, and that of newspapers more than five times, larger than in 1851.

Public Libraries.

In all the colonies public libraries have been established. The Public Libraries in Melbourne and Sydney are splendid institutions, the former comparing favourably with many of the libraries in European capitals. The following table shows the number of libraries which furnished returns, and the number of books belonging to them, for the latest year for which information is available :—

	No. of Libraries.	No. of Books.
New South Wales	342	520,000
Victoria	367	1,054,881
Queensland	115	152,589
South Australia	158	276,451
Western Australia	34	59,427
Tasmania	41	80,043
New Zealand	304	409,604
Australasia	1,361	2,552,995

In Western Australia there are 37 Agricultural Halls and 17 Miners' Institutes, which contain, approximately, 6,000 volumes. The Victoria Public Library in Perth, a Government institution, possesses 30,000 volumes.

FOOD SUPPLY AND COST OF LIVING.

CONSIDERING the comparatively high rate of wages which prevails, food of all kinds is fairly cheap in Australasia, and articles of diet which in other countries are almost within the category of luxuries are largely used even by the poorer classes. The average quantities of the principal articles of common diet annually consumed in the various colonies are given below :—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Grain—	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Wheat	356·3	340·6	336·1	380·0	558·5	448·1	450·1	375·1
Rice	10·0	7·2	17·5	10·8	21·3	6·9	8·6	9·9
Oatmeal	7·7	7·6	3·9	5·2	9·4	16·5	10·1	6·7
Potatoes	194·8	258·7	164·6	138·8	167·1	495·3	494·8	266·1
Sugar	103·0	92·3	129·9	98·8	114·3	84·9	88·9	99·6
Tea	7·8	7·2	7·7	7·7	10·0	6·1	6·3	7·3
Coffee	0·5	0·8	0·5	0·9	0·9	0·3	0·4	0·6
Cheese	4·1	3·3	4·1	2·6	6·6	3·8	4·5	3·8
Butter	18·3	12·3	11·4	11·9	27·8	12·3	19·0	15·5
Salt	42·0	40·6	57·8	27·0	17·8	18·3	32·4	30·8
Meat—								
Beef	162·7	126·2	280·0	...	149·0	135·5	90·0	150·0
Mutton	118·9	79·4	90·0	...	147·3	93·1	110·0	101·2
Pork and bacon	11·9	11·5	...	...	27·6	15·9	...	12·5

It will be seen that the consumption of wheat ranges from 336 lb. in Queensland and 340 lb. in Victoria to 558 lb. in Western Australia, the average consumption for Australasia being 375 lb. per head. The high figures for Western Australia are, of course, due to the large proportion of adult male population in that colony. There is in most of the colonies a tendency towards reducing the consumption of breadstuffs, the place of bread being taken by potatoes and other vegetables. In Western Australia and in Tasmania the large influx of miners during recent years has materially increased the consumption of breadstuffs to such an extent indeed as almost to counterbalance the decline in the other provinces. In all the colonies, also, there has been a decrease in the consumption of rice ; at present the quantity used varies, ranging between 6·9 lb. in Tasmania and 21·3 lb. in Western Australia. The use of tea is universal in Australia, but there has been a perceptible decline in the quantity used during the last twelve years. The consumption is

largest in Western Australia, with 10·0 lb. per head, while New South Wales comes next with 7·8 lb. per head. Sugar also enters largely into consumption, the average in the two principal colonies being 103·0 lb. per head in New South Wales and 92·3 lb. in Victoria. Coffee is not a universal beverage in Australasia, the consumption being only one-twelfth that of tea. It is used most largely in Western Australia and South Australia, where the annual demand amounts to 0·9 lb. per head; but, like tea, the consumption of this beverage is not now so great as formerly.

In some of the colonies the consumption of potatoes per head of population is possibly less than is shown in the table. It is probable that the high average consumption of 495·3 lb. in Tasmania and 494·8 lb. in New Zealand is caused by the failure of the New South Wales and other continental markets to absorb the production of potatoes in excess of local requirements in those colonies, with the result that a quantity has to be given to live stock and poultry. Under these circumstances, it is impossible to determine with exactitude the quantity entering into the food consumption of the population.

The consumption of meat has been ascertained with exactness for five of the colonies, but these may be taken as fairly representing the whole group. The average quantity of beef consumed in the year amounts to 150·0 lb. per head; of mutton, to 101·2 lb.; and of pork, 12·5 lb.; in all, 263·7 lb. It would thus appear that each inhabitant of these colonies requires daily nearly three-quarters of a pound of meat, and that during the year two sheep are killed for each member of the community, and one bullock to every five persons. It is obvious, therefore, that much meat must be wasted.

The quantity of meat used by the Australasian people, as shown by the above figures, is the most remarkable feature of their diet. The consumption per inhabitant in Germany is 64 lb., while in Australia it is four times that quantity. In the United States, a meat exporting country, the consumption is little more than half that of Australasia. The following table shows the meat consumption per head for the principal countries of the world :—

Country	Per inhabitant.	Country	Per inhabitant.
	lb.		b
Great Britain	109	Holland	57
France	77	Sweden	62
Germany	64	Norway	78
Russia	51	Denmark	64
Austria	61	Switzerland	62
Italy	26	United States	150
Spain	71	Canada	90
Belgium	65	Australasia	264

Judged by the standard of the food consumed, the lot of the population of Australasia appears to be far more tolerable than that of the people of most other countries. This will be seen most clearly from the following table, the particulars given in which, with the exception of the figures referring to Australasia, have been taken from Mulhall's *Dictionary of Statistics*:—

Country.	Lb. per Inhabitant.						Tea and Coffee—Oz.
	Grain.	Meat.	Sugar.	Butter and Cheese.	Potatoes.	Salt.	
United Kingdom	378	109	75	19	380	40	91
France	540	77	20	8	570	20	66
Germany	550	64	18	8	1,020	17	78
Russia	635	51	11	5	180	19	6
Austria	460	61	18	7	560	14	28
Italy	400	26	8	4	50	18	20
Spain	480	71	6	3	20	17	6
Portugal	500	49	12	3	40	17	18
Sweden	560	62	22	11	500	28	112
Norway	440	78	13	14	500	40	144
Denmark	560	64	22	22	410	25	140
Holland	560	57	35	15	820	20	240
Belgium	590	65	27	15	1,050	...	142
Switzerland	440	62	26	11	140	...	110
Roumania	400	82	4	9	80	...	8
Servia	400	84	4	9	80	...	8
United States	370	150	53	20	170	39	162
Canada	400	90	45	22	600	40	72
Australasia	392	264	100	19	266	31	126

Taking the articles in the foregoing list, with the exception of tea and coffee, and reducing them to a common basis of comparison, it will be found that the amount of thermo-dynamic power capable of being generated by the food consumed in Australasia is only exceeded by that eaten in Germany, Holland, and Belgium. For the purpose of comparison the figures of Dr. Edward Smith, F.R.S., in his well known work on *Foods*, have been used, and the heat developed has been reduced to the equivalent weight lifted 1 foot high. In estimating the thermo-dynamic effect

of food, grain has been reduced to its equivalent in flour, and regard has been paid to the probable nature of the meat consumed. The figures for potatoes are given as they appear in the *Dictionary of Statistics;* but it is a probable supposition that but a small proportion of the quantity over 400 lb. set down for any country is required for human consumption, and the figures relating to some of the countries—notably the three just mentioned—are therefore excessive. The substances specified above are largely supplemented by other foods, both in America and in Europe, but not more so than in these colonies, and the figures in the table may be taken as affording an accurate view of the comparative quantity and food value of the articles of consumption in the countries mentioned. To make such a comparison perfectly just, however, the average amount of work which each individual in the community is called upon to perform should be taken into consideration. In Australasia the proportion of women and children engaged in laborious occupations is far smaller than in Europe and America, and the hours of labour of all persons are also less, so that the amount of food-energy required is reduced in proportion. In his *Dictionary of Statistics*, under the heading of "Diet," Mulhall gives a measure of the aggregate amount of work performed by persons doing physical and mental labour, and it would appear that when burnt in the body the food of an average man should be equal to at least 3,300 foot tons of work daily; of a woman, 2,200; and of a child, 1,100 foot tons. For Australasia the average of all persons would be about 2,125 foot tons, whereas from the table just given it would appear that the amount of work to which the daily food consumed by each individual in the colonies is equivalent is not less than 4,184 foot tons.

It must be admitted, however, that the method of comparison adopted in the table is not entirely satisfactory, as the different functions of various kinds of food have not been considered. Experiments and observations made in Europe show that a standard may be set up by which the amount of nutrients required to maintain different classes of people may be measured. Professor Voit, of Munich, whose authority is accepted by European specialists, has ascertained that to sustain a labouring man engaged in moderately hard muscular work there are required 118 grams of protein and quantities of carbo-hydrates and fats sufficient with the protein to yield 3,050 calories of energy. There are 454 grams in a pound avoirdupois, and the calorie is the amount of heat that would raise the temperature of 4 lb. of water 1° Fahrenheit. Applying the ascertained values of the various foods, the consumption of which has just been given, it will be found that the daily consumption per inhabitant is equivalent to 105 grams of protein and 3,195 calories, or about the quantity Professor Voit declares to be sufficient for a labouring man. If allowance be made for the fact that only 40 per cent. of the population are adult males, 33 per cent. women, and 27 per cent. children, the quantity of food consumed in Australasia would appear to be far in excess of the actual requirements of the population, and though

the excess may be looked upon as waste, it is none the less evidence of the wealth of the people whose circumstances permit them to indulge in it.

The following table gives the annual consumption of tobacco in Australasia and the principal countries of the world. The use of tobacco appears to be more prevalent in Western Australia and Queensland than in any of the other colonies, while the smallest consumption is in Tasmania and South Australia. Compared with other parts of the world, the average consumption of Australasia will not appear excessive :—

Country.	lb.	Country.	lb.
Australasia	2·36	Austria-Hungary	3·77
New South Wales	2·53	Italy	1·34
Victoria	2·06	Spain	1·70
Queensland	2·86	Holland	6·92
South Australia	1·83	Belgium	3·15
Western Australia	5·08	Switzerland	3·24
Tasmania	1·80	Sweden	1·87
New Zealand	2·18	Denmark	3·70
United Kingdom	1·41	Turkey	4·37
France	2·05	United States	4·40
Germany	3·00	Canada	2·11
Russia	1·23	Brazil	4·37

All the colonies except Tasmania manufacture tobacco, and the following figures show the average consumption of the locally-made and of the imported article during the last three years. The average quantity of imported leaf used in the local manufacture is also shown:—

State.	Consumption of locally-made—			Consumption of imported—			Import of Leaf.
	Tobacco.	Cigars.	Cigarettes	Tobacco.	Cigars.	Cigarettes	
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
New South Wales	1,978,893	5,008	238,846	904,755	192,001	83,861	1,085,795
Victoria	1,082,989	79,511	184,835	968,031	100,685	17,643	1,036,208
Queensland	573,900	2,618	16,529	656,567	60,026	56,006	44,164
South Australia	*	*	*	157,517	35,087		467,754
Western Australia	*	*	*	569,934	66,067	60,669	78,677
Tasmania	.....	.....	.....	300,293	16,093	14,888	.....
New Zealand	46,420	1,929		1,434,140	73,516	116,132	44,228

* Information not available.

Taking Australasia as a whole, it compares very favourably with most European countries in the average quantity of intoxicants consumed, as the following statement shows. The figures, which are reduced to

gallons of proof spirit from data given in Mulhall's *Dictionary of Statistics*, would appear even more favourable to Australasia were the fact of the large preponderance of males over females in these colonies made a feature of the comparison :—

Country.	Proof gallons.	Country.	Proof gallons.
United Kingdom	3·57	Portugal	3·00
France.....	5·10	Holland.....	4·00
Germany.....	3·08	Belgium	4·00
Russia.....	2·02	Denmark	5·00
Austria	2·80	Scandinavia	4·36
Italy	3·40	United States	2·65
Spain	2·85	Australasia	2·41

The following table shows the average consumption for all the colonies during the last three years :—

State.	Spirits.		Wine.		Beer, &c.		Equivalent in Alcohol (proof) per inhabitant
	Total.	Per inhabitant.	Total.	Per inhabitant.	Total.	Per inhabitant.	
	galls.	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales.	951,548	0·73	858,477	0·66	12,446,932	9·58	2·17
Victoria	838,900	0·72	2,254,256	1·94	13,704,562	11·76	2·83
Queensland	444,772	0·98	249,622	0·55	5,278,665	11·58	2·64
South Australia ...	141,057	0·39	815,633	2·26	3,224,124	8·95	2·23
Western Australia.	268,363	1·85	155,062	1·07	3,453,343	23·84	5·24
Tasmania	66,658	0·39	15,842	0·09	1,238,155	7·33	1·37
New Zealand	470,132	0·65	104,043	0·14	5,900,349	8·18	1·75
Australasia.....	3,181,430	0·74	4,452,935	1·03	45,246,130	10·48	2·41

The largest consumption of spirits per inhabitant is in Western Australia, Queensland being second. Wine is used most freely in Victoria, South Australia, and Western Australia ; and beer, in the colony of Western Australia. The average consumption of alcohol in all the colonies for the last three years amounted to 2·41 gallons of proof spirit per inhabitant, ranging from 5·24 gallons in Western Australia to 1·37 gallons in Tasmania. There was a great diminution in the quantity of alcohol consumed in Australasia from 1889 to 1895 ; but since that year an annual increase is again observable, which is probably in great part due to the improvement in the economic condition of the people. In 1889 the average consumption was 2·82 gallons of proof alcohol ; in 1890 it was 2·90 gallons ; in 1891, 2·94 gallons ; in 1892, 2·63 gallons ; in 1893, 2·19 gallons ; in 1894, 2·13 gallons ; in 1895, 2·10 gallons ; in

1896, 2·33 gallons; in 1897, 2·41 gallons; in 1898, 2·47 gallons; and in 1899, 2·41 gallons. Part of the increased consumption in 1896, as compared with the preceding year, must be set down to the fact that it was for the first time possible in that year to calculate the Western Australian consumption exactly.

Several descriptions of Australian wines have a natural strength of 30 per cent. of proof spirit, while from analyses which have been made it would appear that the strength of these wines offered for sale varies from 24 to 37 per cent. of spirit. Imported beers range from 13·88 per cent. to 15·42 per cent. in the case of English, and from 9·58 per cent. to 11·76 per cent. of proof spirit in Lager, while the local manufacture varied according to the make from 11 to 14, the average being slightly below 13·5 per cent. Four of the colonies manufacture spirits, and five make wine, while beer is brewed in all the colonies; and as the locally-made article may be subjected to a lower duty under federation than the imported article, the average consumption of locally-manufactured spirits, wine, and beer for the last three years has been estimated, and will be found in the following statement:—

State.	Spirits.		Wine.		Beer, &c.	
	Total.	Per inhabitant.	Total.	Per inhabitant.	Total.	Per inhabitant.
	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales	6,428	0·005	780,152	0·60	10,764,865	8·28
Victoria	189,231	0·16	2,218,364	1·90	13,210,880	11·34
Queensland	59,409	0·13	205,499	0·45	4,856,330	10·66
South Australia	23,141	0·06	810,796	2·25	3,056,391	8·49
Western Australia	.....	...	81,443	0·56	2,610,871	18·02
Tasmania	.....	...	.....	...	1,191,008	7·05
New Zealand	.....	...	.....	...	5,712,348	7·92
Australasia	278,209	0·06	4,096,254	0·95	41,402,693	9·59

If the figures in this table be subtracted from those in the table on the preceding page the consumption of imported goods will be found.

Cost of Living.

Sufficient data are not available to enable a calculation to be made of the cost of living in all the colonies, but with the materials to hand an estimate can be arrived at for New South Wales. In the year 1892 an estimate was made of the yearly expenditure of the population of that colony, and it was found that it amounted to £55,445,000; but during the following years there were a shrinkage in incomes and a falling-off in the consumption of articles of luxury, and a revision of the figures in 1894 brought out a total some 16 per cent. lower. Since the year 1895 a material improvement has, however, taken place in the economic

condition of the people, and a revision of the figures made for the year 1899 gave a total expenditure of £52,563,000, or only about 5 per cent. less than in 1892. The following figures show the average expenditure per inhabitant, distributed under the principal heads, for 1899 :—

Division of Expenditure.	Per Inhabitant. £	s.	d.
Food and non-alcoholic beverages	13	15	2
Fermented and spirituous liquors	3	4	2
Tobacco	0	16	10
Clothing and drapery	5	10	3
Furniture	0	11	0
Rent or value of buildings used as dwellings	4	8	10
Locomotion	1	7	5
Fuel and light	1	10	1
Personal attendance, service, and lodging	1	17	5
Medical attendance, medicine, and nursing	1	3	5
Religion, charities, education (not including State expenditure)	0	14	7
Art and amusement	0	17	2
Books, newspapers, etc.	0	12	5
Postage and telegrams, not incidental to earning the incomes	0	4	5
Direct taxes not falling on trade	0	11	4
Household expenses not included elsewhere	1	11	0
Miscellaneous expenses	0	19	5
Total	£39	14	11

The expenditure for the year, viz., £39 14s. 11d. per head, was at the rate of 2s. 2d. per day. The daily expenditure may be thus distributed:—

Division of Expenditure.	Per day.	Proportion of Expenditure.
	d.	per cent.
Food	9·0	34·6
Fermented and spirituous liquors	2·1	8·1
Clothing and drapery	3·6	13·9
Rent	2·9	11·2
Direct taxes	0·4	1·4
Sundries	8·1	30·8
Total	26·1	100·0

In certain colonies (Western Australia and Queensland) where there is a large adult male population the expenditure was probably higher, but in the others less than in New South Wales.

The conditions of life and the standard of living are much the same in all the colonies, but it would undoubtedly be incorrect to assume that the average expenditure throughout Australasia is equal to that of New South Wales. Making a reduction on the New South Wales rates for some of the colonies and an increase for others, such as the

circumstances seem to warrant, the expenditure for Australasia would be as follows :—

Division of Expenditure.	Total Expenditure. £	Per Inhabitant. £ s. d.
Food and non-alcoholic beverages	56,164,000	12 15 11
Fermented and spirituous liquors	13,101,000	2 19 8
Tobacco	3,433,000	0 15 7
Clothing and drapery	22,507,000	5 2 7
Furniture	2,251,000	0 10 3
Rent or value of buildings used as dwellings	18,117,000	4 2 7
Locomotion	5,584,000	1 5 6
Fuel and light	6,162,000	1 8 1
Personal attendance, service, and lodging	7,634,000	1 14 10
Medical attendance, medicine, and nursing	4,775,000	1 1 9
Religion, charities, education (not including State expenditure)	2,970,000	0 13 6
Art and amusement	3,494,000	0 15 11
Books, newspapers, etc.	2,528,000	0 11 6
Postage and telegrams, not incidental to earning the incomes	904,000	0 4 2
Direct taxes not falling on trade	2,309,000	0 10 6
Household expenses not included elsewhere	6,328,000	1 8 10
Miscellaneous expenses	3,998,000	0 18 3
Total	£162,259,000	36 19 5

According to Mulhall, the expenditure per inhabitant in the leading countries of Europe and in America is as follows :—

Country.	Expenditure per Inhabitant. £ s. d.	Country.	Expenditure per Inhabitant. £ s. d.
United Kingdom	29 14 9	Norway	19 0 0
France	23 19 4	Denmark	28 11 5
Germany	20 3 4	Holland	20 17 4
Russia	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland	18 0 0
Italy	11 11 0	United States	32 16 2
Spain	15 12 6	Canada	23 6 2
Portugal	11 5 6		
Sweden	20 8 4	Australasia	36 19 5

The table just given affords but a partial view of the question of the cost of living, for if the total earnings of the countries above enumerated be considered as an element of comparison, it will be found that few countries approach Australasia in the small proportion of income absorbed in providing food for the people. The following table, given on the same authority as the preceding, shows that while the actual cost of food and drink is £15 15s. 7d. in Australasia as against £14 4s. 9d. in Great Britain, the earnings required to pay for this food are not larger proportionately than in the countries which show most favourably

in the table. The number of working days in the year is assumed to be 300, allowing for thirteen days' sickness and fifty-two Sundays:—

Country.	Average annual cost of food and beverage.	Ratio of cost of food to earnings.	Days' earnings equal to annual cost of food.
	£ s. d.	per cent.	days.
United Kingdom ...	14 4 9	42·2	127
France	12 4 5	44·0	142
Germany	10 18 5	49·1	148
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	153
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	135
United States.....	9 17 7	25·3	76
Canada.....	8 9 0	32·5	97
Australasia	15 15 7	37·5	112

Price Levels.

The following tables have been compiled with the object of showing to what extent the colonies have been affected by the general fall in the prices of commodities during the past thirty-eight years. The figures refer to New South Wales alone, but they may be accepted as also indicating in a fairly accurate degree the position in which the other provinces of Australasia stand in regard to this matter. The total value of the exports of each of the colonies is greatly affected by the prices obtained for certain leading lines of raw produce, of which, in the case of New South Wales, wool, silver, and coal are the most important. In the subjoined table the price-level of domestic exports of that colony is given for the forty years beginning with 1860. In order to ascertain the price-level, all the principal articles of domestic produce exported have been taken, the prices of 1899 have been applied to the quantities of each of the other years, and the result has been compared with the actual total of such year, the level of the year being found by dividing the actual value into the value which would have been obtained had the prices of 1899 prevailed. The average for 1899 is assumed to be 1,000, the price-levels or index numbers of the other years being as shown in the table. In order to further facilitate comparison of different years, the average of the five years 1870–74 has been assumed to be 1,000, and the prices of other years have been adjusted to that basis. In compiling the price-level for exports, only articles of insignificant

value have been omitted from consideration, and in no year does the value of articles included form less than 85 per cent. of the total exports, while in some years the proportion rises as high as 95 per cent., the average of all years being above 90 per cent. It is considered that this system enables a more reliable estimate of the relative prices to be obtained than that of selecting the prices of certain articles without giving due weight to the quantities of such articles exported :—

Year.	Price-level of Exports.		Year.	Price-level of Exports.	
	1899 prices = 1,000.	Average of 1870-74 prices = 1,000.		1899 prices = 1,000.	Average of 1870-74 prices = 1,000.
1860	1,695	1,247	1880	1,228	903
1861	1,692	1,244	1881	1,219	897
1862	1,781	1,310	1882	1,258	926
1863	1,619	1,191	1883	1,258	926
1864	1,790	1,316	1884	1,247	919
1865	1,638	1,203	1885	1,095	806
1866	1,697	1,249	1886	1,053	775
1867	1,568	1,154	1887	1,082	797
1868	1,569	1,155	1888	1,050	773
1869	1,432	1,053	1889	1,066	785
1870	1,195	879	1890	1,030	758
1871	1,461	1,075	1891	936	689
1872	1,331	979	1892	886	652
1873	1,411	1,037	1893	802	590
1874	1,398	1,028	1894	723	532
1875	1,393	1,027	1895	741	546
1876	1,320	972	1896	779	573
1877	1,211	891	1897	757	557
1878	1,205	887	1898	801	590
1879	1,251	921	1899	1,000	736

These figures show that there has been a great fall in the prices of colonial produce exported since 1860, or still greater since 1864, viz., from the index number 1,316 to 736, or over 44 per cent. Marked fluctuations, ranging to about 10 per cent., occurred between 1860 and 1866, when the index number was about the same as in the first-named year. From 1866 to 1870 there was a drop from 1,249 to 879, or about 30 per cent. A rise followed in 1871 to 1,075, or about 22 per cent., after which for four years prices continued fairly steady, until there was a further decline to 887 in 1878. In 1879 the level rose to 921 and for the next four years prices continued without much change, but from 1884 to 1885 there was a fall from 919 to 806. This was succeeded by a fairly even range until 1889, when the level stood at 785. From 1889 there was a steep decline to 532 in 1894, a fall of 32 per cent. for the five years, but in 1895 and 1896 prices recovered a little, and the level rose to 573—an advance of 7·7 per cent. In 1897 there was again a slight fall from 573 to 557, equivalent to 2·8 per cent., but in 1898 the level rose to 590, and in 1899 to 736, a rise of 32 per cent. for the two

years. The sharp rise in 1899 was entirely due to the improved price obtained for wool. It will be seen that the purchasing power of money has steadily increased since 1864—if the Customs values of the exports fairly represent the prices ruling the general community, whether in the colony or elsewhere—and that 20s. in 1899 would purchase the same articles of domestic export which in 1864 would have cost nearly 36s., prices having fallen 44·1 per cent. during the period of thirty-five years. The greatest decline has taken place in the three staple exports of wool, silver, and coal, and if these articles be excluded, it will be found that the fall in prices of the balance of the exports would, for a number of years preceding 1899, not reach so high a percentage as the fall in prices of all domestic exports. In 1899, however, the rise in the price of wool, which amounts to five-eighths of the value of all articles included in the calculation, was great enough to make the fall in the balance of the exports appear larger than the fall in the total.

It must not be supposed that Australia has been a loser by the fall in the prices of its exports to the extent which the price-level shows, because the power of the exports to purchase imports must also be taken into consideration. It will, therefore, be necessary to consider also the price-level of imports. As there exist no reliable data on which price-levels for imports can be based prior to 1870, the table commences with that year :—

Year.	Price-Level of Imports.		Year.	Price-Level of Imports.	
	1899 prices = 1,000.	Average of 1870–74 prices = 1,000.		1899 prices = 1,000.	Average of 1870–74 prices = 1,000.
1870	1,372	966	1885	1,123	790
1871	1,378	970	1886	1,103	776
1872	1,441	1,014	1887	1,113	783
1873	1,463	1,030	1888	1,107	779
1874	1,449	1,020	1889	1,153	812
1875	1,366	962	1890	1,142	804
1876	1,341	944	1891	1,090	767
1877	1,290	908	1892	1,045	736
1878	1,279	900	1893	1,006	708
1879	1,224	862	1894	956	673
1880	1,233	868	1895	946	666
1881	1,220	859	1896	984	693
1882	1,214	855	1897	994	700
1883	1,234	869	1898	1,006	709
1884	1,224	862	1899	1,000	704

It may be said generally that the fall in prices was somewhat in favour of the exports up to the year 1889. Since then the exports have fallen away on the average values at a much more rapid rate than the imports. A clearer view of the operation of the fall in prices will be obtained from the table which is given below, showing the price-levels

of imports of merchandise for home consumption and exports of domestic produce, for periods of five years to the end of 1899, with the relative fall per cent. :—

Period.	Imports.		Exports.	
	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.
1870–74	1,000	.....	1,000	.....
1875–79	915	8·5	940	6·0
1880–84	863	5·9	914	2·9
1885–89	788	8·5	787	13·8
1890–94	737	6·5	645	18·0
1895–99	694	5·8	600	7·0

It will be seen that, assuming the index number of the five years 1870–74 to be 1,000, the fall in the succeeding five years was 8·5 per cent. for the imports, as compared with 6 per cent. for the exports The average value of the imports for the five years ending with 1884 was 5·9 per cent. less than in the preceding quinquennial period, whereas the difference in the value of the exports was 2·9 per cent. During the next five years the average value of the imports declined 8·5 per cent., while the fall in the value of the exports was no less than 13·8 per cent., so that the index number for 1885–89 for both imports and exports was practically the same figure. As already mentioned, the fall for the period 1890–94 was much more heavy in regard to the exports than the imports, amounting to 18 as compared with 6·5 per cent.; but during the period 1895–99 the fall in the exports was not much greater than that in the imports, 7·0 per cent. compared with 5·8 per cent. It may, therefore, be said that the period 1895–99 was considerably more favourable to the colonies than the one immediately preceding.

New South Wales, in common with the other Australasian colonies, is chiefly affected by the fall in prices because it is a debtor country. In the chapter on "Private Finance" will be found certain calculations showing that the annual charge payable by the State and municipalities on their indebtedness to British creditors is £2,034,000 while the earnings of investments made in the colony by private persons, or drawn by absentees, amount to £2,471,000 per annum. As the whole of the interest on Government and municipal loans has to be paid by exports, irrespective of the fall in prices, and as a large portion also of the interest payable to private investors is in the same category, the fall is a matter of very serious importance to these colonies, viewed as debtor States. Fortunately the increase of production, as compared with the population, has been so great in New South Wales as to counteract the fall in prices; but it is hardly possible to believe that the probable increase of production will compensate the colony for a renewed fall at the alarming rate which characterised the period from 1889 to 1894.

LAND AND SETTLEMENT.

IN each of the seven colonies of Australasia a different system has been adopted to secure the settlement of an industrial population upon the Crown lands, the conditions upon which land may be acquired being of a more or less liberal nature according to the circumstances in which a colony has found itself placed. The legislation of Victoria, Queensland, and Tasmania, which at one time formed part of New South Wales, bears a strong resemblance to that of the mother colony, practically the same form of conditional occupation with deferred payments being in existence in all four provinces. In the other colonies, however, the influence of New South Wales was not so directly felt, and new experiments were made. South Australia, for instance, was originally settled upon the Wakefield system—alike remarkable for its originality and its failure. In Western Australia and New Zealand, under pressure of a different set of circumstances, settlement was effected by legislation of a novel character. An attempt is made here to give a description of the land laws of the colonies, although the radical changes which are constantly being made render the task of giving a serviceable account of the various systems a somewhat difficult one. During the past seven years, numerous Acts affecting State lands have been placed in the statute book, and, at the date of the publication of this volume, New South Wales, Victoria, and Tasmania contemplate amending legislation, so that it is impossible to say how long the information given in this chapter can be taken as representing the latest phases of land legislation in Australasia.

New South Wales.

With the progress and development of the colony, the land laws of New South Wales have naturally undergone considerable alteration. In the earliest period alienation was effected by grants, orders, and dedications, the power of disposal resting solely with the Governor. In August, 1831, the principle of sale by auction was introduced, the minimum price for country lands being fixed at 5s. per acre. This was raised to 12s. in 1839, and to 20s. in 1843, power being given in the latter year to select at the upset price country portions for which a bid was not forthcoming at auction, or upon which the deposit paid at the time of sale had been forfeited. This was the first appearance of the principle of selection in the laws of the colony, but it was limited to lands which had been surveyed for sale by auction.

The discovery of gold in 1851, and the consequent rush of population to Australia, greatly altered the conditions of colonisation. As the

interest in gold-digging declined, so did the desire for settlement on the land increase, and the question had to be dealt with in an entirely new spirit, to meet the wants of the class of immigrants desirous of being placed upon the soil. The agitation which thus sprang up resulted in the passing of the Crown Lands Act of 1861, under the leadership of Sir John Robertson. This measure was designed to secure the establishment of an agricultural population side by side with the pastoral tenants. With this object in view an entirely new principle was introduced—that of free selection in limited areas before survey, coupled with conditions of residence and improvement—and country lands were sold at 20s. per acre, payable by annual instalments carrying interest.

The occupation of waste lands for pastoral purposes was at first allowed under a system of yearly licenses. Any person could apply for such a license, the extent of the run which it was desired to occupy being limited only by the boundaries of the surrounding stations. The fee was fixed at £10 per annum for a section of 25 square miles, with £2 10s. for every additional 5 square miles. This system of yearly licenses was succeeded by one under which the squatter was given fixity of tenure, the fee payable being calculated upon the stock-carrying capacity instead of upon the area of the run. Still another system was inaugurated by the Occupation Act of 1861, the period of tenure being limited to five years in all but first-class settled districts, and the whole of the pastoral leases left open to the operations of the free selectors. But such evils were found to result from this system that in 1884, in 1889, and again in 1895, Parliament was led to adopt amendments which are now in force, and which, while maintaining the principle of selection before survey, aim at giving fixity of tenure to the pastoral lessee and obtaining a larger rental from the public lands, while at the same time securing land to *bonâ-fide* settlers on terms and conditions within the reach of all.

For the purposes of land administration, the colony is split up into three divisions, each of which is subdivided into land districts. One or more of these land districts form a local division, the administration of which is entrusted to a Local Land Board, comprising a chairman and not more than two assessors. The decisions of these Local Land Boards may be appealed against to the Land Appeal Court. This Court is composed of a President and two members appointed by the Executive, and its decisions in matters of administration have the force of judgments of the Supreme Court; but whenever questions of law become involved, a case may be submitted to the Supreme Court, upon the written request of the parties interested, or by the Land Appeal Court of its own initiative. The judgment given in this appeal is final.

Under the Acts at present in force, land may be acquired by the following methods:—(1) By conditional and additional conditional purchase with residence; (2) by conditional purchase without residence; (3) by the preferent right of purchase attached to conditional leases; (4) by

improvement purchases on gold-fields; (5) by auction sales; (6) by after auction sales; (7) by special sales without competition; and (8) by homestead selection.

The maximum area which may be conditionally purchased differs in the eastern and central divisions. In the western division land can only be occupied under lease, or alienated by conditional purchase within special areas, by auction or special sale, or by homestead selection.

Eastern Division.

The conditions for the purchase and occupation of Crown lands are more restricted in the eastern division than in the central and western divisions. Nevertheless, any person above the age of 16 years may, upon any Crown lands not specially exempted, select an area of 40 to 640 acres, together with a lease of contiguous land not exceeding thrice the area of the conditional purchase. The combined area of purchase and lease must not, however, exceed 1,280 acres. The price demanded is £1 per acre, of which 2s. must be deposited when application is made, and the balance, together with interest at the rate of 4 per cent., paid by instalments of 1s. per acre per annum. Payment of instalments commences at the end of the third year, and after the expiry of the period of enforced residence the balance may be paid in one sum at any time. The selector must reside on his selection for a period of ten years, and within three years erect a substantial fence around the land; in some cases, however, other permanent improvements are allowed in lieu of fencing. He is restricted to one selection during his lifetime; but after the expiry of the residential period he may purchase additional areas contiguous to his original purchase up to the maximum area, or he may purchase his conditional leasehold. In such a case, however, he must extend his period of residence, and enclose his additional purchase. Married women judicially separated may select in their own right; and minors taking up lands adjoining the selection of their parents may fulfil the condition of residence under the paternal roof until the age of 21 in the case of males and 24 in that of females.

A conditional leasehold, in conjunction with a selection, may be held for twenty-eight years. The rental is fixed by the Land Board. The leasehold must be enclosed within three years; one fence, however, may enclose both the conditional purchase and the lease. A lease may at any time be converted into a purchase. The term of residence on the conditional purchase and leasehold must aggregate ten years from the date of application.

When land is conditionally purchased without residence, the maximum area is limited to 320 acres, and no conditional lease is granted. The selection must be enclosed within twelve months after survey, and within five years additional improvements must be made to the value of £1 per acre. The price demanded is £2 per acre, and the deposit and instalments payable are twice as high as those required in the case of an ordinary conditional purchase. No person under 21 years

of age may select land on non-residential conditions; and anyone who takes advantage of the provisions permitting the acquirement of a conditional purchase without residence is not allowed to make any other conditional purchase.

Special areas may be thrown open to selection under special conditions. The price is not less than £1 10s. per acre, and the maximum area which may be taken up is 320 acres. Non-resident selectors are charged double the rates payable by those who reside on the land.

The capital value of conditional purchases and conditional leases applied for prior to the 30th December, 1899, and held *bonâ fide* for the applicant's sole use and benefit may be the subject of reappraisement up to an area, sufficient, in the opinion of the Local Land Board, to enable him to maintain a home thereon, provided the application therefor is lodged prior to the 30th December, 1901.

Central Division.

In the central division land may be conditionally purchased on terms as to residence, fencing, improvements, price, and mode of payment similar to those which govern selection in the eastern division. The maximum area which may be selected is 2,560 acres, and a conditional lease in the proportion granted in the eastern division may be secured, but the aggregate area of both selection and lease must not exceed 2,560 acres. The area which may be purchased without residence, and the conditions in regard thereto, are the same as in the eastern division. Within special areas the maximum extent of a selection has been fixed at 640 acres.

Western Division.

The western division embraces an area of 79,970,000 acres, watered entirely by the Darling River. This part of the colony is essentially devoted to pastoral pursuits. Conditional purchases, except on special areas, are not allowed, but permanent pastoral settlement is encouraged under homestead lease, which may be obtained for a term of twenty-eight years within resumed areas or upon vacant lands. The minimum area obtainable is 2,560 acres, and the maximum, 10,240 acres. A deposit of 1d. per acre must be lodged with the application. The lessee is required to reside upon the land for six months during each of the first five years. The whole area must be fenced in within two years, unless the Land Board allow an exemption in respect of a natural or other boundary. Tenant-right in improvements is secured to the outgoing lessee, who may, during the last year of the term, convert into a homestead selection 640 acres on which his dwelling-house is erected.

Homestead Selection.

Among the special features of the Act of 1895 was the introduction of the principle of classification and measurement of lands prior to selection. Under this system suitable land is set apart and rendered

available for the purposes of the selector. The appropriation of areas for homestead selection is another prominent feature of the Act. The tenure of such a selection is freehold, subject to perpetual residence and perpetual rent, and the construction of a dwelling-house at a cost of not less than £20. Six months' rent and part of the survey fee must be lodged when application is made. Until the grant issues, the rent is fixed at $1\frac{1}{4}$ per cent. on the capital value of the land; afterwards, it is raised to $2\frac{1}{2}$ per cent., and the selection is subject to reappraisement every ten years. Provided an application is made before the 31st December, 1900, the capital value of homestead selections applied for on or before 29th December, 1899, may be reappraised. In cases where the application for the homestead selection is of a subsequent date, reappraisement may be made before the selection is confirmed, or within twelve months after, but not later. Tenant-right in improvements is secured, and the holding may be so protected that it cannot by any legal procedure, or under any circumstances, be wrested from the selector.

Settlement Leases.

Another departure under the Act referred to is the provision for settlement leases for agricultural and grazing purposes. Under this form of tenancy, lands gazetted in any division as available for settlement lease are obtainable on application, accompanied by a deposit consisting of six months' rent and survey fee. Of agricultural land the maximum area which may thus be taken up is 1,280 acres, and of grazing land, 10,240 acres. The lease is issued for a period of twenty-eight years, and the conditions which attach to it are that the lessee shall reside on the land throughout the term, and fence it in during the first five years. Provided an application is made before the 31st December, 1900, the capital value of settlement leases applied for on or before the 29th December, 1899, may be reappraised. In cases where the application for the settlement lease is of a subsequent date, reappraisement may be made before the lease is confirmed, or within twelve months after, but not later. Tenant-right in improvements is secured to the outgoing lessee, who may, during the last year of the term, convert a portion not exceeding 1,280 acres into a homestead selection.

Scrub and Inferior Lands.

The principle of improvement leases secures, in any division, the utilisation of scrub or inferior lands that would otherwise remain unoccupied. The term for which such a lease is issued is twenty-eight years, and the rent is determined according to the circumstances of each case, the object being to secure the profitable occupation of otherwise valueless lands. The maximum area obtainable is 20,480 acres. The outgoing lessee has tenant-right in improvements, and may, during the last year of the term of his lease, convert into a homestead selection 640 acres on which his dwelling-house is erected.

Pastoral and other Leases.

Under the Act of 1884 pastoral leases were surrendered to the Crown, and divided into two equal parts. One of these parts was returned to the lessee under an indefeasible lease for a fixed term of years; the other half, called the resumed area, might be held under an annual occupation license, but was always open to selection—by conditional purchase in the eastern and central divisions, and by homestead lease in the western division. Under the Act of 1895, the tenure of pastoral leases in the western division was fixed at twenty-eight years. In the central division a pastoral lease extends to ten years. In certain cases a further extension ranging up to five years has been secured by virtue of improvements effected; beyond this, however, the Crown has power to further extend the term of the lease for the remainder of a pastoral holding where a portion of such holding has been resumed for the purpose of settlement. Tenant-right in improvements made with the consent of the Crown is secured to the outgoing lessee. If in the western division he may, during the last year of his lease, convert into a homestead selection 640 acres on which his dwelling-house is erected. When application is made for an occupation license for the expired leasehold area, a license-fee, equal in amount to the sum formerly payable as rent, must be lodged as a deposit.

In addition to pastoral and homestead leases, special leases on favourable terms are granted of scrub lands; snow lands—that is lands covered with snow during a part of the year; inferior lands; and portions of land required for the protection of artesian wells. Annual leases for pastoral purposes, and residential leases on gold and mineral fields, are also granted; and special leases are allowed in certain cases.

Auction Sales.

Auction sales to the extent of not more than 200,000 acres in any one year are permitted. The upset price is fixed by the Minister for Lands. For town lands it must not be less than £8 per acre; for suburban lands, £2 10s.; and for country lands, £1 5s. Special terms can be made for the purchase of land on gold-fields, and for reclaimed lands.

Labour Settlements.

In the middle of 1893 an Act was passed to establish and regulate labour settlements on Crown Lands, following the example set by New Zealand, and imitated by several other colonies. Under this Act the Minister may set apart certain areas for the purpose of establishing labour settlements. A settlement is placed under the control of a Board, which enrols such persons as it may think fit to become members of the settlement; makes regulations concerning the work to be done; apportions the work among the members; and equitably distributes wages, profits, and emoluments after providing for the cost of the maintenance of the members. Any trade or industry may be established by the Board, and the profits apportioned among the enrolled

members. A Board is constituted as a corporate body, with perpetual succession and a common seal; and the land is leased to the Board as such, in trust for the members of the settlement, for a period of twenty-eight years, with right of renewal for a like term.

When a Board has enrolled such a number of persons as the Minister for Lands may approve, it may apply for monetary assistance on behalf of the members of the settlement. The Minister has power to grant an amount not exceeding £25 for each enrolled member who is the head of a family dependent upon him; £20 for each married person without a family; and £15 for each unmarried person. On the expiration of four years from the commencement of the lease, and at the end of each year following, 8 per cent. of the total sum paid to the Board becomes a charge on its revenues, until the total amount advanced, with interest at the rate of 4 per cent. per annum, has been repaid.

VICTORIA.

During the earlier period of the colonisation of Victoria, then known as the District of Port Phillip, in New South Wales, the alienation of Crown lands was regulated by the Orders in Council of the mother colony, to which reference has already been made. In the year 1840, however, the upset price of country lands, which in New South Wales was limited to 12s. per acre, was specially raised to 20s. in the District of Port Phillip. The Orders in Council continued in force until 1860, when the system of free selection of surveyed country lands was inaugurated, the uniform upset price being fixed at £1 per acre. No condition was required to be fulfilled by the selector other than that of making a cash payment for the whole of his purchase—or for one-half only, the other half being occupied at a yearly rental of 1s. per acre, with right of purchase at the original price. In 1862 a new Act was passed. Large agricultural areas were proclaimed, within which land could be selected at a uniform price of £1 per acre. Modifications were introduced in the mode of payment; the maximum area which could be selected by one person was limited to 640 acres; and it was stipulated that certain improvements should be effected or part of the land placed in cultivation. This Act was amended in 1865, when the principle was introduced of leasing Crown lands within agricultural areas, with right of purchase after the fulfilment of certain conditions as to residence and improvements; and a new provision was added to meet the demand for land adjacent to gold-fields.

The legislation in force was, however, superseded by the Land Act of 1869 and the Pastoral Act of the same year. Until that time the free selection system in the colony had been limited to certain lands proclaimed within agricultural areas, and to allotments previously surveyed, thus avoiding the conflict which was then beginning to take place in New South Wales between the selector and the pastoralist. Under pressure of a sudden increase in the demand for land, arising from the

enormous immigration into Victoria which had followed the discovery of gold, and the necessity for the people finding other means of employment, and other and more permanent sources of income, the Victorian Legislature adopted the system in vogue in the neighbouring colony, with modifications to suit the local conditions. The Act of 1869, which was amended in 1878, was further amended in 1884, the main tendency of the latter amendment being towards the restriction of the further alienation of the public estate by limiting the area which might be sold by auction, and substituting for the existing method of selecting agricultural land a system of leasing in certain defined areas, and at the same time conserving to the lessee the privilege of acquiring from his leasehold the fee-simple of 320 acres under the system of deferred payments. A portion of the public domain, known as the "Mallee Scrub," comprising some 11½ million acres wholly or partly covered with various species of stunted trees, was separately dealt with by the Mallee Pastoral Leases Act of 1883. The land legislation of 1869, and the special enactment just referred to, were again modified by the Acts of 1890, 1891, 1893, 1896, and 1898.

The Land Act of 1869 is inoperative as to future selections, but concessions as to payments of arrears of rent, the option of converting their present leases into perpetual leases, and of surrendering part of and obtaining new leases on better terms for the balance of their holdings, have been granted to selectors thereunder by the most recent legislation.

For the purposes of land administration, the colony is divided into districts which are merely arbitrary divisions, and in each district there are land offices under the management of land officers. As occasion requires the land officers hold board meetings to deal with applications for, and any matter pertaining to Crown lands.

Unalienated Crown lands are divided into the following classes :—Good agricultural or grazing land; agricultural and grazing lands; grazing lands; pastoral lands (large areas); swamp or reclaimed lands; lands which may be sold by auction (not including swamp or reclaimed lands); auriferous lands; State forest reserves; timber reserves; and water reserves. Provision is made for a reclassification of lands within the first, second, third, and fourth classes, where it is recognised that an inequality exists, and for this purpose Land Classification Boards are constituted, each board to consist of three members who will be officers of the Lands Department or other competent persons. Land may be acquired in the following manner :—(1) By the lessee of pastoral lands, by selection of a homestead up to 640 acres of land not superior to third-class land out of his leasehold at 10s. per acre; (2) by the lessee of a "grazing area" who is entitled to select thereout an agricultural allotment, obtaining a perpetual lease of the allotment in lieu of a license; (3) by licensee or lessee of an agricultural allotment on the surrender of his license or lease, obtaining in its stead a perpetual lease; (4) by the holder of a mallee allotment, eligible to select an agricultural allot-

ment thereout, obtaining a perpetual lease instead of a license; (5) by perpetual leases of any Crown lands available as agricultural or grazing allotments, or mallee lands available as agricultural allotments, or swamp, or reclaimed lands; (6) by purchase at auction of town or country lands within specified areas; (7) by purchase at auction of detached portions of Crown lands of an area not exceeding 50 acres; (8) by the holder of a residential agricultural allotment under license within mallee territory; (9) by farm allotment under conditional purchase lease, within areas required for the purpose of closer settlement.

Pastoral Lands.

Pastoral leases are granted to the person first lodging an application after public notice has been given that the land is available, and expire on 29th December, 1909. The maximum area is 40,000 acres, and the minimum, 1,280 acres. Should more than one application be lodged, the right to a lease is sold by public auction, after at least one month's notice has been given in the *Government Gazette*, and the highest bidder by way of premium is, on payment of same, entitled to the lease. A pastoral lessee must pay rent in advance every six months; he cannot assign, sublet, or subdivide without the consent of the Board in writing; he must destroy all vermin and noxious growths, and keep in good condition all improvements on the land; and he must not destroy growing timber, except for fencing purposes or for building on the land, without the Board's consent. The Crown has the right to resume any portion of the area required for any railway or public purposes, and may issue licenses to enter on the land to obtain timber, stone, earth, &c. The right is reserved to other pastoral lessees to pass over the area, and the Governor may at any time by proclamation grant to the public the use of any track leading to a public road or track. The lessee is also required to erect swing gates where there is a fence across any track required by any other pastoral lessee or the public. Upon compliance with all conditions the lessee may select 200 acres of first-class, or 320 acres of second-class, or 640 acres of third-class land, as a homestead. Upon the expiration of a lease the lessee is entitled to payment from an incoming tenant for all fences, wells, reservoirs, tanks, and dams—but such payment must not exceed 2s. 6d. an acre—and all other improvements revert to the Crown.

Agricultural and Grazing Lands.—Grazing Areas.

Agricultural and grazing lands are leased in "grazing areas" of first, second, or third-class land, to any person of the age of 18 years, for any term of years expiring not later than 29th December, 1920. No such lease can be granted for more than 200 acres of first-class, or 640 acres of second-class, or 1,280 acres of third-class land; but the lease may comprise two or more "grazing areas," provided the total acreage does not exceed the maximum limit of any class. The rent is fixed

at 3d. per acre for first-class, 2d. per acre for second-class, and 1d. per acre for third-class lands; but an additional rent of 4 per cent. per annum on the capital value of any substantial and permanent improvements on the "grazing area" at the date of the commencement of the lease is imposed. On the expiration of the lease the incoming tenant is required to pay to the late lessee the value of all improvements, effected during the currency of the lease, calculated to increase its capacity for carrying sheep or cattle; but the sum to be paid in respect of such improvements must not be more than 10s. per acre of the "grazing area" if first-class, or 7s. 6d. per acre if second-class, or 5s. per acre if third-class land. All other improvements revert absolutely to the Crown, unless specially provided for in the lease of the "grazing area." The rent is payable half-yearly in advance, and the lessee cannot assign, sublet, or subdivide, without the consent of the Board; he must destroy all vermin and noxious growths and keep in good condition all improvements on the land. The lessee cannot ring or destroy, or, except for the purpose of fencing, or building, or domestic use on the land, cut down any timber thereon, without the consent of the Board, and he must enclose the land with a fence and keep it in good repair. The Crown may resume possession at any time of any of the land which may be required for public or mining purposes, or for removal of material or timber, or for industrial purposes, on payment of reasonable compensation. Every other lessee of a "grazing area" and his agents and servants have the right of ingress, egress, and regress to and from his "grazing area" through, from, and to any public road or track. The lessee, after the issue of the lease, may, if the "grazing area" consist of first-class land, select not more than 200 acres thereout as an "agricultural allotment," if of second-class land, an "agricultural allotment of" of 320 acres, and if of third-class land a "grazing allotment" of 640 acres. A lessee of a "grazing area" in respect of which no rent is due, and who has reasonably and sufficiently fulfilled the conditions and covenants of his lease, may surrender any part of his "grazing area" in order that a new "grazing area" lease of such surrendered part may be granted to his wife or any eligible child, without public competition.

Agricultural Allotments.

Residence licenses are issued to any person of the age of 18 years, who has not made a selection under the Land Acts, or who is not in respect of the license applied for or any part thereof an agent, servant, or a trustee for any other person, or who has not at any time entered into an agreement to permit any other person to acquire by purchase or otherwise the applicant's interest therein, to occupy an "agricultural allotment" not exceeding in the aggregate 200 acres of first-class or 320 acres of second-class land. The period of license is six years, and the rent 6d. per acre for first-class and 4½d. per acre for second-class land; payable half-yearly in advance. The licensee cannot assign,

transfer, or sublet; he must enclose the land with a fence and keep it in repair; and he must effect substantial and permanent improvements to the value of 20s. per acre, or fractional part of an acre, where the land is first-class, and 15s. an acre, or fractional part of an acre, where the land is second-class, during the currency of the license. The licensee must enter into occupation within twelve months from the issue of the license, and occupy the agricultural allotment for not less than five years during its currency. If a licensee satisfactorily prove that the home of his family is situate upon the land held by him under residential license, the Board may consent, for a specified period, to substituted occupation by the wife or any stated child over the age of 18 years; or, if he has no wife or child, by the father or mother of the licensee, provided he or she is dependent on him for support. A licensee may, in each and every year of the term of residence on residential license, apply to the land officer of the district to register a written notice of intention to absent himself from the agricultural allotment for a period or periods not exceeding on the whole three months, and any absence between the registered dates is not deemed a breach of the condition of occupation. If the conditions be complied with, the licensee is entitled at any time within twelve months after six years from the commencement of the license to obtain a Crown grant upon payment of the difference between the amount of rent actually paid and the entire sum payable for the purchase of the land, or obtain a lease for a term of fourteen years. The Crown may resume any portion of the land during the currency of the license that may be required for public or mining purposes, subject to the repayment of moneys paid by the licensee to the Crown or expended by him on the land resumed.

Non-residential licenses for a period of six years are issued to persons similarly qualified on identical conditions, with the exception that the annual rent is double that for residence areas, and the improvements to be effected are 6s. 8d. per acre, or fractional part of an acre each year of the license on first-class land, and 5s. per acre, or fractional part of an acre for each of the first three years of the license in respect of second-class lands.

The licensee or lessee of an agricultural allotment may surrender his license or lease, and in its stead obtain a perpetual lease. The rent chargeable therefor to 29th December, 1909, is based upon the unimproved value of the land, which is assumed at £1 per acre if first-class and 15s. per acre if second-class land; thereafter the rent is fixed by the Board at the end of every successive ten years. The holder of an agricultural allotment who desires to establish and cultivate a vineyard, hop-garden, or orchard may during the term of his license or lease, upon payment of the difference between the amount of rent actually paid and the entire purchase-money payable in respect of any part, not more than 20 acres, of his allotment, obtain a Crown grant of such part subject to such covenants, conditions, exceptions, and reservations as the Governor may direct.

Grazing Allotments.

Licenses, either residential or non-residential, are issued to persons, qualified in a similar manner to those entitled to hold agricultural allotments, to occupy an allotment of third-class land not exceeding 640 acres. The period of license is six years, and the rent payable 6d. per acre, half-yearly in advance. In the case of a residential license, the licensee must enter into occupation within twelve months from the issue of the license, and occupy the grazing allotment for not less than five years during the currency of the license. If a licensee satisfactorily prove that the home of his family is situate upon the land held by him under residential license, the Board may consent, for a specified period, to substituted occupation by the wife or any stated child over the age of 18 years ; or, if he has no wife or child, by the father or mother of the licensee, provided he or she is dependent on him for support. A licensee may, in each and every year of the term of residence on residential license, apply to the land officer of the district to register a written notice of intention to absent himself from the grazing allotment for a period or periods not exceeding on the whole three months, and any absence between the registered dates is not deemed a breach of the condition of occupation. Substantial and permanent improvements must be effected to the value of 10s. per acre, or fractional part of an acre, in respect of residential licenses, and 3s. 4d. each year of the first three years for each acre, or fractional part of an acre, in the case of non-residential licenses. The licensee cannot assign, transfer, or sublet ; he is required to keep the land free from vermin, and must enclose the land and keep the fence in repair. The Crown may resume any portion of the land during the currency of the license that may be required for public or mining purposes subject to the repayment of moneys paid by the licensee to the Crown or expended by him on the land resumed. If the conditions be complied with the licensee is entitled at any time within twelve months after six years from the commencement of the license to obtain a Crown grant upon payment of the difference between the amount of rent actually paid and the entire sum payable for the purchase of the land, or obtain a lease for a term of fourteen years. The holder of a grazing allotment, who desires to establish and cultivate a vineyard, hop-garden, or orchard, may during the term of his license or lease, upon payment of the difference between the amount of rent actually paid and the entire purchase-money payable in respect of any part, not exceeding 20 acres, of his allotment, obtain a Crown grant of such part subject to such covenants, conditions, exceptions, and reservations as the Governor may direct. Any person who is entitled to select a grazing allotment may apply for a perpetual lease of the allotment in lieu of the license.

Perpetual Leases.

Perpetual leases may be granted over any Crown lands available as agricultural or grazing allotments ; over mallee lands available as agri-

cultural allotments ; and over swamp or reclaimed lands. They may also be granted to holders of grazing areas who are entitled to select thereout an agricultural or grazing allotment ; to holders of mallee allotments or parts thereof eligible to select an agricultural allotment ; to holders of permits or leases to occupy allotments on swamp lands ; and to village settlers on other than swamp lands who may desire to surrender the same and obtain perpetual leases in lieu thereof. No person is allowed to hold by transfer or otherwise more than 600 acres of first-class, or 960 acres of second-class, or 1,920 acres of third-class land outside the mallee country. The rent on every perpetual lease, outside mallee and swamp or reclaimed lands, to 29th December, 1909, is $1\frac{1}{4}$ per cent. on the unimproved value of the land, which is deemed to be £1 per acre for first-class, 15s. per acre for second-class, and 10s. per acre for third-class land. For every successive period of ten years the value, exclusive of all improvements made by the lessee, will be such amount as may be fixed by the Board, and the annual rent will be $1\frac{1}{4}$ per cent. of such value. The rent must be paid yearly in advance. The lessee must destroy all vermin within two years, and keep the land free from vermin and noxious growths ; he must enclose the land within six years, or sooner if called upon under the Fences Act, 1890 ; he must reside for six months on the land, or within 5 miles thereof during the first year, and eight months during each of the four following years. In the event of the cultivation by the lessee of one-fourth of the area during the first two years and one-half before the end of the fourth year the residence covenant ceases to operate. Improvements must be effected to the value of 10s. per acre on first-class, 7s. 6d. per acre on second-class, and 5s. per acre on third-class land before the end of the third year, and further improvements to a like value before the end of the sixth year of the lease. The lessee may not transfer, assign, mortgage, sublet, or part with the whole or any portion of the area within six years ; and any portion required for railways, roads, mining, or other public purposes may be resumed on payment for non-removable improvements thereon or cost of removable improvements. A perpetual lessee whose rent is not in arrear may surrender his lease within six months after 29th December, 1909, or within six months after any successive period of ten years, with a view of obtaining an agricultural or grazing allotment license either residential or non-residential. The improvements made will be credited to the licensee, and should there be a mortgage on the perpetual lease, the licensee may, after the issue of the license, give to the mortgagee a license lien on his improvements to the full amount due on the mortgage at the time of surrender.

Lands within Auriferous Areas.

Licenses to reside on or cultivate lands comprised within an auriferous area may be granted for a period not exceeding one year, and for areas not exceeding 20 acres, at an annual license fee of 1s. per acre. No person can hold more than one license The license is subject to

the following conditions :—Right to use surface of land only ; licensee not to assign or sublet without permission of the Minister ; licensee either to reside on or fence the land within four months from date of license and cultivate one-fifth of area, allowance being made for any portion occupied by buildings ; miners to have free access to any part of the land without making compensation to the licensee for surface or other drainage ; and notices to be posted on the land by the licensee indicating that it is auriferous.

Grazing licenses, renewable annually at the option of the licensee, are issued for a period expiring not later than 29th December, 1905, for areas not exceeding 1,000 acres, at a rent to be fixed by appraisement. The licensee may, with the consent of the Minister of Mines, enclose the whole or any specified part of the holding with a fence, which may be removed by him upon or at any time before the expiration of his license ; but such fence must be removed, without compensation, by the licensee when so ordered by the Board. Free access to such area must be allowed at all times to miners and other persons specially licensed to enter thereon ; the ringbarking of the timber on the land by the licensee is strictly forbidden ; and the licensee is subject to a penalty, not exceeding £20, if he fails to place upon the outside of the corner posts of the fence, if any, enclosing the lands such distinguishing marks as may be prescribed.

Auction Lands.

Lands comprised within certain areas notified in a schedule attached to the Act of 1891, and lands within proclaimed towns or townships, or within any city, town, or borough proclaimed before the passing of the Lands Act of 1884, may be sold at auction, the upset price for town lands being determined in the proclamation for sale, and that for country lands, £1 per acre. The maximum area that may be sold in any one year is 100,000 acres. Of the price, 12½ per cent. must be paid in cash, and the balance in forty half-yearly instalments, carrying interest at 4 per cent. per annum. Where, in the opinion of the Board, it is undesirable that the residue of the price of any land should be paid for by instalments extending over twenty years, such residue may be made payable in any number of half-yearly instalments less than forty. Stringent provisions are enacted prohibiting agreements preventing fair competition at auction sales. Isolated portions of Crown lands not exceeding 50 acres and not adjoining other Crown lands, or any portion of Crown lands not exceeding 3 acres required for a site for a church or for any charitable purpose, may be sold at auction.

Swamp Lands.

The swamp or reclaimed lands comprise the areas known as Condah, Koo-wee-rup, Moe, Panyzabyr, Mokoan, Black Swamp, Borodomanin, and Brankeet, Greta, Kelfeera, and Pieracle Swamps, and any swamp

or reclaimed lands that may be proclaimed as such in the *Government Gazette*. The lands are divided into allotments of an area not exceeding 160 acres, and may be leased for twenty-one years, or be leased under perpetual lease at a rental of 4 per cent. on the value of the land, or be leased under conditional purchase lease, or be disposed of by sale at public auction, subject to general conditions of sale. Every lease for twenty-one years, every perpetual lease, every conditional purchase lease, and every contract of sale for an allotment of swamp or reclaimed lands contains the condition that the lessee or purchaser shall make substantial improvements on the land to the extent of 10s. per acre in each of the first three years and keep open all canals and drains. The condition of residence is not obligatory in all cases. For determining the rent on the upset price the Board will fix the value of each allotment. Village settlers on swamp or reclaimed lands may surrender their permits or leases, and acquire in place thereof perpetual leases or conditional purchase leases. In the event of a perpetual lease being granted, the annual rent thereon till 29th December, 1909, will be 4 per cent. on the price of the land as fixed in the surrendered permit or lease, the improvements at time of surrender to be credited towards compliance with conditions of new lease. In the event of a conditional purchase lease being granted, the price to be paid will be that fixed in the surrendered permit or lease, carrying interest at 4½ per cent. per annum.

Lands enhanced in Value.

Where Crown lands are enhanced in value by the proximity of a railway, or of waterworks for irrigation purposes, etc., the Governor is empowered to increase the minimum sum per acre for which such lands may be sold, as well as the minimum amount of rent or license fee, by not less than one-eighth nor more than double the sum. But where lands have been sold, leased, or licensed at an enhanced price, and the works by reason of which the extra payment has been demanded have not been constructed within ten years from the date of the Order in Council fixing the enhanced price, the additional sum paid must be returned.

Forest Lands.

Land situated within the State forests, and timber and water reserves, cannot be alienated, except as hereinafter provided; and the administration of the Forest Domain of the Crown is placed in the hands of local Forest Boards, which are empowered to receive fees for licenses to cut or remove timber. Where any person has made his home, or the home of his family, for a period of five years on forest lands, whether permanently reserved or not, and has effected thereon improvements of the value of not less than £2 per acre, he may apply to purchase an area not exceeding 10 acres at a price to be determined by appraisement; and if there be no mining or other valid objection a Crown grant may issue.

Mallee Lands.

The territory known generally as the "Mallee" is situated in the north-western district of the Colony, and comprises an area of about 10,000,000 acres. The mallee land bordering on the plain country is mostly of a light chocolate and sandy loam character, and in its natural state is covered with mallee scrub, interspersed with plains lightly timbered with box, oak, and pines. The scrub can be cleared at a moderate expenditure, and the land is well adapted for wheat-growing. The smaller areas are known as "mallee allotments," and the larger areas, extending further north and where the soil is more sandy in character, as "mallee blocks." The "blocks" are practically in their natural state, are many square miles in extent, and are used for pastoral purposes only.

Mallee Blocks.

The "mallee blocks" are of various sizes. One portion of a block may be held for five years under an occupation license, and the other under lease for a period expiring not later than the 1st December, 1903. The lease is granted for a period of twenty years. For the first five years the rent payable is at the rate of 2d. per head of sheep and 1s. per head of cattle depastured on the land; for the second five years twice this amount; and for the remainder of the term at an additional increase equal to one-half the amount payable during the second period of five years; but in no case may the yearly rent be less than 2s. 6d. for each square mile or part of a square mile of land. Leases issued after the 20th February, 1896, have the rent fixed by the Board. The lessee cannot assign, subdivide, or cultivate any part without the consent of the Board of Land and Works; he must destroy the vermin upon the land, and fulfil certain other conditions. The Government retain the right of resuming the land after giving due notice, compensation for improvements effected being given on assessment. Licenses may be granted to enter on the block to obtain timber, stone, earth, &c., and other lessees may cross the area to get to any public road or track.

Mallee Allotments.

The mallee allotments are situated on the southern and eastern fringe of the mallee territory, and have a maximum area of 20,000 acres, and are leased for terms expiring not later than 30th November, 1903.

No assignment of the lease of a mallee allotment by operation of law can take effect without the consent of the Board, and the lessee without such consent cannot execute any mortgage or lien thereon. The lessee is required, within six months of the granting of the lease, to take up his residence on the land or within 5 miles thereof, and to remain there for at least six months in the first year, and nine months during each of the next four years; or, instead, to cultivate at least one-fourth of the allotment within two years, and at least one-half before the end of the fourth year. In the event of the insolvency or death of the lessee,

residence is not obligatory on the assignee, executor, or administrator. Without the consent of the Board, the lessee cannot clear or cultivate any part of his allotment, and not more than five crops in succession may be raised, after which for one year the land must be allowed to lie fallow. A uniform rental of 1d. per acre per annum is now charged in all cases where the Board's consent has been obtained to clear and cultivate.

It is provided that the lessee may select out of his mallee allotment an agricultural allotment not exceeding 640 acres, either under license or perpetual lease. When this is done the remainder of the mallee allotment may be resumed, compensation being awarded for improvements only. Should the lessee have actually resided on the land and destroyed the vermin thereon, the period of six years for which the agricultural allotment license is issued may be so shortened as not to exceed the length of such residence, conditionally on the payment of the license fees.

Agricultural Allotments under License or Perpetual Lease.

Any person of the age of 18 years may select 640 acres of first-class, or 1,000 acres of second-class land out of any area made available as an agricultural allotment under residential or non-residential license or perpetual lease. A similar concession is made to any holder of a mallee allotment who may make application at any time before the 30th November, 1903, to select out of his mallee allotment a similar area in like manner. The period of residence attached to residential licenses is five years. When the area is first-class land, the purchase money in full for a residential license is £1 per acre, and the license is for a term of six years, at a yearly rent of 1s. per acre; the improvements at the expiration of the license must be of the value of £1 per acre. If all the conditions be complied with, the licensee is entitled, at the expiration of the license, to a lease for fourteen years at the same rent, or to a Crown grant at any time, on paying the difference between the amount paid and £1 per acre. If the applicant prefer, he may obtain a license at a reduced rental of 6d. per acre per annum for the term of six years, with a lease for thirty-four years at 6d. per acre yearly. When the area is second-class land, the purchase money in full is 10s. per acre, and the license is for a term of six years at a yearly rent of 6d. per acre, and the lease for fourteen years at the same rent, or a license may be issued, with conditions varied in these respects, that the rent shall be 3d. per acre yearly for six years, with a subsequent lease for thirty-four years at the same rent. The improvements at the end of the six years must be of the value of 10s. per acre. A non-residential license on first-class land is granted for a term of six years at 1s. per acre per annum, and the lease for a period of fourteen years at the same rent. Improvements to the value of 6s. 8d. per acre must be made in each of the six years. The period of non-residential license on second-class land is six years, at an annual rent of 6d. per acre, and the lease is for

fourteen years at the same rent. Improvements to the value of 3s. 4d. an acre must be made during each of the first three years. Except for the purpose of building, fencing, or other improvements, the licensee may not cut or remove any live pine, box, or red gum, on the land.

Perpetual leases of mallee country are issued, in areas not exceeding 1,920 acres, at a yearly rental not to exceed 2d. per acre to 31st December, 1903, and thereafter as the Board may determine. The rent must be paid yearly in advance, and the lessee must destroy any vermin on the land, and within two years have made a complete clearance of such pests, while during the remainder of his lease he must see that the land is kept free from them. Within six months, the lessee must reside on or within 5 miles of the land, and do so for a period of eight months in each of the second, third, fourth, and fifth years. In the event of the lessee cultivating one-fourth of the area within two years, and at least one-half within four years, the residence condition ceases to operate.

Vermin Districts.

Under the Land Act of 1890, districts which are proclaimed as vermin-infested are, for the purpose of securing the extinction of these animal pests, administered by local committees appointed by the owners, lessees, and occupiers of the lands. In order to secure the erection of vermin-proof wire-fencing, a fencing rate may be levied, and the Minister has power to deduct 5 per cent. of the amount levied in vermin districts for the purpose of erecting a vermin-proof fence between the mallee country and the mallee border.

Wattle Cultivation.

During 1890 legislation was enacted having for its object the granting of leases of any unoccupied Crown lands for the cultivation of wattle-trees, for any term not exceeding twenty-one years, at a rent of 2d. per acre per annum for the first seven years, 4d. per acre for the second seven years, and 6d. per acre for the remainder of the term. A lease is not granted for more than 1,000 acres; and the rent is payable half-yearly in advance. The lessee covenants not to assign, sublet, or divide the lease without the consent of the Board of Land and Works; to keep all improvements in repair during each of the first six years following the year after the granting of the lease; to sow or plant wattle-trees or any other approved tannin-producing trees or plants on at least one-fifth of the land leased, and within six years to occupy the whole area in a similar manner. He must within two years enclose a third, within three years two-thirds, and within four years the whole of the land leased; and he is required to keep the fence in good repair, and to destroy all vermin which may be upon the land. The lessee may select out of his lease an agricultural or grazing allotment under license or perpetual lease.

Village Settlements.

Under the Settlement on Lands Act of 1893 there may be set apart and appropriated for the purposes of village communities any lands not alienated from the Crown, provided they are not auriferous or permanently reserved for any purpose. Such lands are surveyed into allotments of 1 to 20 acres each, according to the quality of the soil and the situation. Subject to certain restrictions, any person of the age of 18 years may obtain a permit to occupy a village community allotment for a period not exceeding three years. The rent is merely nominal, but conditions are laid down with the object of ensuring *bona-fide* occupancy. On the expiration of the permit a lease may be obtained, provided the conditions of the permissive occupancy have been fulfilled. The lease is granted for a period of twenty years. The lessee must pay in advance, every half-year, rent equal to one-fortieth of what is regarded as the price of the allotment, which is to be not less than £1 per acre. Within two years from the date of the lease he must have brought into cultivation not less than one-tenth, and within four years, one-fifth of the land; and within six years, have effected substantial improvements of a permanent character to the value of £1 for every acre leased. He must also keep all improvements in good repair; and he cannot assign, transfer, or sublet the land, or borrow money on the security of his lease without the consent of the Board of Land and Works. He must reside personally on the land, and use it for agriculture, gardening, grazing, or other like purpose. Any person in occupation of an allotment under permit or lease may surrender the same, and acquire the land under a perpetual lease, or a conditional purchase lease. In the event of the land being granted under perpetual lease, the rental thereon to 29th December, 1909, will be 250 per cent. on the price set out in the original permit or lease; should the land be granted as a conditional purchase lease, the price to be paid is that fixed in the surrendered permit or lease carrying interest at 4½ per cent. per annum.

Homestead Associations.

Areas of similar lands to the foregoing may also be set apart and appropriated for occupation by members of associations or societies; but no proclamation can remain in force for a longer period than three years in the case of a society, nor for more than six months in the case of an association, after the survey and subdivision of the block; and land in any block not occupied or leased at the expiration of these periods becomes unoccupied Crown land again. No block of land set apart for the purposes of associations or societies can exceed in area 2,000 acres. A block is subdivided into lots of not more than 50 acres each, and the number of persons to be located in each block must not be less than one for every 50 acres of its total area. A permissive occupancy of a section may be granted to any member of an association or a society for a period of three years. The rent is a nominal one, and after proof of fulfilment of conditions a lease may be obtained by the member, provided he is of the

age of 18 years. The lessee covenants to pay the annual rent and the cost of survey; to repay all moneys advanced by the Board; to bring into cultivation within two years not less than one-tenth, and within four years not less than one-fifth of the land; and within six years to effect substantial improvements of a permanent character to the value of £1 for every acre leased. He must also keep the improvements in good repair; and he cannot assign, transfer, or sublet the land, or borrow money upon it without the consent of the Board of Land and Works. He must personally reside on his section or its appurtenant township allotment, and use the land for agriculture, gardening, grazing, dairying, or other like purpose. Adjoining to or within every block of land appropriated in this manner, an area of not more than 100 acres may be set apart for the purposes of a township, and the Board of Land and Works may subdivide it into allotments not exceeding one acre, in order to provide a township allotment for each homestead selection. Power is reserved to alienate the fee-simple of those allotments not required for the purpose; and every settler may, within one year from the commencement of his permit or lease, obtain a lease of such an allotment, with the right to a Crown grant in fee on making the payment prescribed.

Labour Colonies.

Areas of similar land, not exceeding 1,500 acres in extent, may also be set apart for the purpose of labour colonies, to be vested in five trustees, appointed by the Governor. For the purpose of aiding the trustees, provision is made whereby persons subscribing to the funds of such a colony may annually elect a committee of management, consisting of four members. The joint body (trustees and committee) is empowered, on a day to be determined in each case by the Minister, to admit to such a colony any person who shall be entitled to such benefits as the rules of the colony may prescribe. The trustees and committee of each colony must establish and conduct the same; and they have all the powers and authority necessary to enable them to improve the position of the colony and make it self-supporting. They may establish and maintain any industry they please, and dispose of the proceeds thereof. A subsidy of £2 for every £1 received by the trustees and committee from public and private subscriptions is payable by the Government. The moneys received are to be disbursed in the payment of allowances for work to persons employed in the colony; in the construction and maintenance of necessary buildings; and in purchasing provisions, clothing, building materials, stock, seed, and agricultural implements.

Besides the foregoing provisions, there are numerous others, dealing with minor interests, which in a general statement of this kind it is not necessary to recapitulate.

Acquisition of Land for Closer Settlement.

The acquisition of private lands for the purpose of closer settlement is an entirely new feature in Victorian land legislation. The Board of

Lands and Works may, subject to the approval of Parliament, purchase for the Crown, blocks of good agricultural private land in any farming district. The portion of the acquired land to be disposed of is to be subdivided into farm allotments of a value not exceeding £1,000 each, which are to be available under conditional purchase lease. Any person of the age of 21 years, who is not already the holder of land of the value of £1,000, or who would not thereby become the holder of land exceeding such value, may be granted a farm under conditional purchase lease. The price of the land to be disposed of is to be so fixed as to cover the cost of original purchase, cost of survey and subdivision, the value of lands absorbed by roads and reserves, and the cost of clearing, draining, fencing, or other improvements which the Board may effect prior to the disposal of the land as farm allotments. The purchase money, with interest at 4½ per cent. per annum, must be paid by sixty-three or a less number of half-yearly instalments. The conditional purchase lease may be for such a term of years (not exceeding thirty-one and a-half) as may be agreed upon between the lessee and the Board. The lease is subject to the following conditions :—Improvements to be effected to the value of 10s. an acre, or if the Board so determines, to the value of 10 per cent. of the purchase money, before the end of the third year of the lease, and to the value of a further 10s. an acre, or if the Board so determines, to the value of a further 10 per cent. of the purchase money before the end of the sixth year of the lease ; personal residence by the lessee, or by his wife, or any child not less than 18 years of age, on the allotment for eight months during each year of the first six years ; lessee not to transfer, assign, mortgage or sub-let within the first six years ; and such other conditions and covenants relating to mining, cultivation, vermin destruction and other matters as may be prescribed by regulation. Upon or at any time after the expiration of the first six years of the lease, provided all conditions have been complied with, the lessee may, on payment of the balance of the principal, acquire the fee-simple of his farm allotment.

Queensland.

The land legislation of New South Wales in force on the date when the Moreton Bay District was formed into the colony of Queensland, gave place soon after that event to a new system of settlement, better adapted to the requirements of the newly constituted province. Following to a certain extent the lines adopted by their neighbours, the Queensland legislators introduced into their regulations the principle of free selection before survey, and of sales under the deferred payment system. Having to dispose of a vast territory which, not being endowed with so temperate a climate, had not the same attractions as the southern provinces, it was considered necessary to exercise greater liberality in offering the land than was shown to settlers in the other colonies. Large areas and small prices were therefore features of Queensland land sales.

Most liberal, also, were the provisions to facilitate the exploration and occupation for pastoral purposes of the vast interior country, and the Pastoral Act of 1869 led to the occupation by an energetic race of pioneers of nearly the whole of the waste lands of the province. The rapid development of the resources of the colony, and the consequent increase of population, necessitated later on a revision of the conditions under which land might be alienated or occupied; but although the tendency has been to curtail the privileges of the pastoralists, the alienation of the public estate by selection—conditional and unconditional—has been placed under enactments of a still more liberal character than those which existed in the earlier days. Under pressure of the new social movement, Queensland has followed in the wake of New Zealand and South Australia, and has granted to the working classes great facilities for acquiring possession of the soil. The regulations at present in force are based upon the legislation enacted under the Crown Lands Act of 1884, and its subsequent amendments in 1886, 1889, 1891, 1893, and 1897.

Land may be acquired in the following manner:—(1) By conditional selection: agricultural homesteads from 160 to 640 acres, at prices ranging from not less than 20s. for 160 acres to less than 15s. per acre for 640 acres, and agricultural selections up to 1,280 acres, at a price determined by the proclamation rendering the land available for settlement—residence in both cases to be personal or by agent; (2) by unconditional selection, at prices one-third greater than those payable in respect of agricultural selections, the area being limited to 1,280 acres; (3) by grazing-farm selection up to 20,000 acres, the period of lease ranging from fourteen to twenty-eight years at a varying rental, ½d. per acre being the minimum; (4) by scrub selection of areas not exceeding 10,000 acres for a term of thirty years, at rentals ranging from a peppercorn to 1d. per acre; and (5) by purchase at auction, of town lands at an upset price of £8 per acre, suburban lands at £2 per acre, and country lands at £1 per acre for land classed as agricultural, and 10s. per acre for any other.

The colony is, as far as is necessary, divided into Land Agents' Districts, in each of which there are a Public Lands Office and a Government Land Agent with whom applications for farms must be lodged. Applications must be made in the prescribed form, and be signed by the applicant, but they may be lodged in the Lands Office by a duly authorised attorney. There is connected with the Survey Department, in Brisbane, an office for the exhibition and sale of maps, and there full information respecting lands available for selection throughout the colony can be obtained on personal application. Plans can also be obtained at the District Offices.

The conditions under which country lands may be acquired for settlement by persons of either sex over 16 years of age—married women excepted, unless they are judicially separated or possess separate estate—are substantially as stated below.

Grazing Farms.

Areas of land already surveyed are available for selection as grazing farms over a great extent of territory within accessible distance of the seaboard. Intending settlers can obtain up to 20,000 acres on lease, for a term of fourteen, twenty-one, or twenty-eight years, at an annual rent varying according to the quality of the land, ½d. an acre being the minimum. This rent is subject to reassessment by the Land Board after the first seven years, and subsequently at intervals of seven years. The applicant must first obtain an occupation license, which is not transferable, and which may be exchanged for a lease for the balance of the term of fourteen, twenty-one, or twenty-eight years as soon as the farm is enclosed with a substantial fence, which must be done within three years, or such extended time, not exceeding two years, as the Land Board may allow. The lease may be transferred or mortgaged after the expiration of five years from the commencement of the lease, and the farm may be subdivided, or, with the consent of the Land Board, sublet. The land must be continuously occupied by the lessee or his agent for the whole term of the lease, and cannot be made freehold. The Commissioner may issue a license to a group of two or more selectors, enabling any one of the selectors to perform the condition of occupation in respect of any of the selections as well as on his own behalf, but the number of selectors personally residing is not at any time to be less than half the whole number interested. One-fifth of the cost of survey, ranging from something like £30 for a farm of 2,560 acres to about £65 for 20,000 acres—subject to increase or decrease according to locality—must be paid with a year's rent when application is made for the farm, and the balance in equal instalments without interest.

Grazing Homesteads.

Lands available as grazing farms are also open for selection as grazing homesteads at the same rental and for the same term of lease. An application to select as a grazing homestead takes precedence of a simultaneous application to select the same land as a grazing farm. The conditions and other provisions mentioned in respect of grazing farms are applicable also to grazing homesteads, with the exception that during the first five years of the term of a grazing homestead the condition of occupation must be performed by the continuous personal residence of the selector on the land.

Agricultural Selections.

The more accessible lands near lines of railway, centres of population, and navigable waters, are set apart for agricultural farm selection in areas up to 1,280 acres. The period of license is five years, during which the selector must fence in the land, or expend an equivalent sum in effecting other substantial improvements. As soon as the improvement condition has been complied with, a lease is issued for a term of twenty years from the date of the license, with right of purchase at

any time after continuous occupation of the lease for a period of five years. The annual rent is one-fortieth of the purchasing price specified in the proclamation declaring the land open, and varies according to the quality and situation of the land, its natural supply of water, etc. The selector must occupy the land continuously, either in person or by agent, for the whole term of the lease. The cost of survey, ranging from about £10 to £12 for a farm of 160 acres to £20 to £40 for a farm of 1,280 acres, must be borne by the selector.

When land is taken up as an agricultural homestead, the area is restricted to 160 acres, 320 acres, or 640 acres, according as the price specified in the proclamation is determined at not less than 20s., less than 20s. but not less than 15s., or less than 15s. per acre respectively. The selection must be enclosed within a period of five years, or permanent improvements effected at an expenditure dependent on the capital value of the land. The applicant is entitled to a lease for a period of ten years, at a rental of 3d. per acre; but he may acquire the fee-simple of the land on the terms prescribed in the proclamation, after the expiration of five years from the commencement of the lease.

Two or more selectors of agricultural homesteads may associate for mutual assistance under license from the Land Board. A selector may perform conditions of residence for himself and any other member of the association, provided that at least one-half of the whole number of selectors interested are in actual occupation; and any sum expended on permanent improvements on any one homestead in excess of the required amount may be credited to any other farm or farms in the group. In other respects the conditions are similar to those governing agricultural homesteads.

Village Settlements.

With regard to village settlement, special provision is made by law for the settlement of little communities, so that settlers may live together in townships for mutual convenience, on allotments not exceeding 1 acre in extent, and with farms of 80 acres in close proximity to their residences. The freehold of these farms may be secured generally on the same terms as those upon which agricultural farms not exceeding 160 acres in area may be acquired, with the additional privileges that residence on an allotment in the township is held to be equivalent to residence on the farm, and one-fifth of the required improvements may be made on the allotment.

Unconditional Selection.

Areas of land are also available for unconditional selection at prices one-third greater than those payable in respect of agricultural selections. The term of lease is twenty years, and the annual rent one-twentieth of the purchasing price. At any time during the currency of the lease the freehold may be acquired. As the term implies, no other conditions than the payment of the purchase money are attached to this mode of selection—the area allowed to be selected being 1,280 acres. The pro-

portion of cost of survey, on the same scale as for agricultural selection, must be deposited with the first instalment of purchase money at the time of application, the balance to be paid in equal annual instalments.

Scrub Selections.

Lands which are entirely or extensively overgrown with scrub are available for selection in four classes, determined by the extent of scrub. The area selected must not exceed 10,000 acres, and the term of lease is thirty years, the rent ranging from a peppercorn per acre in the first five years, ½d. an acre for the next succeeding ten years, and 1d. per acre for the remaining fifteen years in respect of lands in the first class, to a peppercorn for the first twenty years, and 1d. per acre for the remaining ten years in relation to those of the fourth class. During the period of lease under which the selector pays a peppercorn rent the whole of the scrub must be cleared—a proportionate area in each year—and the land enclosed. Compensation is paid in respect of clearing on any land resumed, but upon determination of the lease the clearing improvements revert to the Crown.

Auction Lands.

The alienation in fee of allotments in towns is restricted to areas ranging from 1 rood to 1 acre, at an upset price of £8 per acre; while in respect of suburban lands, areas of 1 to 15 acres may be acquired within 1 mile of town lands, and the limit is extended to 10 acres in regard to lands situated over 1 mile from such town lands, the upset price being £2 per acre. In respect of country lands, the maximum area that may be sold in any one year is limited to 150,000 acres, and the upset price is fixed at £1 per acre for land classed as agricultural, and not less than 10s. per acre for any other. A deposit of 20 per cent. is to be paid at time of sale, and the balance, with deed, assurance, and survey fees, within one month thereof.

Co-operative Settlement.

The Co-operative Communities Land Settlement Act of 1893 provides for the setting apart of a portion of Crown lands for the purposes of a group or association of persons for co-operative land settlement, and the condition annexed thereto is that the group shall consist of not less than thirty persons, each of whom is eligible to apply for and hold land under the provisions of the Crown Lands Act of 1884. It is requisite that the group shall be recognised by the Minister, and the rules of the community must be deposited with him. None but natural born or naturalised subjects are eligible to become members of a group, and no person may be a member of more than one community. It is open to a group to register itself under the Friendly Societies Act of 1876, and in such case certain provisions at law dealing with the internal government of the community become inoperative.

The area available for a co-operative community is set apart by proclamation, and cannot exceed in area more than 160 acres for each

member. The proclamation specifies and defines the name of the group; the persons included therein; the boundaries and a description of the area; the improvements to be made; the period for which the area is set apart (not exceeding twelve nor less than six years); and the rent payable for the land. A sum equal to at least 2s. 6d. per acre must be expended during each of four equal portions of the lease, and failing that, resumption of the land and consequent dissolution of the group ensue.

No member of a co-operative community possesses an individual interest or property in the improvements effected on the land, the same being vested in the Minister; but on the expiry of the lease, with the conditions satisfactorily performed, the members, on payment of the proclaimed price (if any) and deed and assurance fees, are entitled to a deed of grant in fee-simple of so much land as was specified in the proclamation, the division of the area being left to the members themselves. In certain cases the acquisition of freehold may be prohibited by the rules of the group, and provision is made for dissolution when the membership falls below a certain number.

Labour Colonies.

Provision is also made for the proclamation of Labour Colonies. The area granted to a colony, which must not exceed 10,000 acres in extent, is vested in five trustees, who are empowered to establish and manage any trade or industry. A subsidy not exceeding £1,000, either conditionally or otherwise, may be granted to a labour colony from Parliamentary appropriations for such purposes.

South Australia.

The settlement of the colony of South Australia was the outcome of an attempt to put into actual practice one of those remarkable theories which logically seem founded upon apparently solid ground, but which are apt to weaken and give way when subjected to the pressure of hard practical facts. The policy by which a wealthy colony was to be created in a few years on the edge of a supposed desert continent, was based upon principles enunciated by Edward Gibbon Wakefield, in a pamphlet published in England about the year 1836. The main idea of his scheme of colonisation was the sale of land in the new possession at a high price, and the application of the amount thus realised to the introduction of immigrants, whom the landowners would at once employ to reclaim the virgin forest, and create wealth and abundance where desolation existed. But although Wakefield had fairly calculated upon the results which would follow the action of man if left to himself, the part which Nature might be expected to play was not taken into consideration, and the scheme quickly proved an empty failure and a distressful speculation for the many whom its apparent feasibility had deluded into investing their means in the lands of the new colony.

Had not the discovery of great mineral resources occurred at an opportune time, the exodus into the eastern colonies of the immigrants imported or attracted to South Australia would have emptied the province of its population, and considerably retarded the progress of a territory not inferior in natural resources to other portions of the Australian continent.

Steps were soon taken to modify the Wakefield system, but it was only in 1872 that an Act was passed more in conformity with the legislation of the neighbouring colonies, and giving to the poorer classes of the population a chance to settle upon the lands of the Crown under fair conditions. The Lands Act of 1872, adapted as it was to the needs of the time, gave way to other measures, and the regulations now in force are those of the Crown Lands Act of 1888, as amended in 1889, 1890, 1893, 1894, 1895, 1896, 1897, 1898, and 1899.

General Provisions.

The law as it now stands gives power to the Government to alienate Crown lands in the following manner:—(1) By auction, town lands, Crown lands within hundreds, and special blocks may be alienated, but no sales of country lands may be made at a price of less than 5s. per acre; a deposit of 20 per cent. is required at time of sale, the residue to be paid within one month therefrom; (2) by lease with right of purchase, the period of lease being twenty-one years, with option of renewal for a further period of twenty-one years, and right of purchase exercisable at any time after the expiration of the first six years of the term, at a price of not less than 5s. per acre. The grant in fee-simple of any land cannot be construed to convey any property in any mineral or mineral oil in or upon the land, the same being reserved by the Crown, although authority may be given to persons at any time to search for and remove any of the minerals reserved.

Leases with Right of Purchase.

No lands may be leased unless they have been surveyed; and the area that a lessee may at any one time hold with a right of purchase is restricted to 1,000 acres. No lease with right of purchase, or perpetual lease, can be granted of lands of such value that the purchase money will exceed £5,000 unimproved value. The Land Boards are entrusted with the duty of classifying lands, and of fixing the area of blocks, the price and annual rent at which each block may be taken up on lease with right of purchase, and the annual rent at which such block may be taken up on perpetual lease. Applications must be made in writing to the Commissioner, and must cover a deposit equal to 20 per cent. of the first year's rent of the block which it is desired to take up. All applications are dealt with by the Land Board, which has power to subdivide or to alter the boundaries of blocks, and to decide what price or annual rent shall be payable. A lessee must execute his lease and pay the balance of the first year's assessment and prescribed fees within

twenty-eight days after the acceptance of his application has been notified and the lease has issued, otherwise he forfeits the deposit paid and all rights to a lease of the land.

Leases with right of purchase are granted for a term of twenty-one years, with the right of renewal for a similar term. Purchase may be made at any time after the first six years. The price must not be less than 5s. an acre.

The rent chargeable on a perpetual lease for the first fourteen years is fixed by the Land Board and notified in the *Government Gazette*, and for every subsequent period of fourteen years a revaluation is made. Every lease contains a reservation to the Crown of all minerals, timber, and mineral oils in or upon the land. The lessee undertakes to fulfil the following conditions :—(1) To pay rent annually; (2) to pay all taxes and other impositions; (3) to fence in the land within the first five years, and thereafter to keep the fences in repair; (4) to commence forthwith to destroy and to keep the land free from vermin; (5) to keep in good order and repair all improvements which are the property of the Crown; (6) to keep insured to their full value all buildings which are the property of the Crown; and (7) to give access to the land to persons holding mining licenses or mineral leases.

A pastoral lessee may surrender his lease for a perpetual lease where the unimproved value of the land comprised therein, together with that of all other lands held by him, does not exceed £5,000, or where, in the opinion of the Commissioner, the land is suitable only for pastoral purposes, and the carrying capacity thereof unimproved, and of all other lands held by the lessee under any tenure does not exceed 5,000 sheep. The annual rent of the perpetual lease in such case is to be determined by the Surveyor-General, subject to the approval of the Commissioner, according to the actual value, irrespective of the amount of the right of purchase granted in respect thereof.

Sale of Lands.

All Crown lands within hundreds which have been offered for lease and not taken up, may be offered for sale at auction for cash within two years of the date on which they were first offered for lease. Other lands may be sold at auction for cash, and not upon credit or by private contract, the Commissioners fixing the upset price of both town and country lots offered; but no country lands may be sold for less than 5s. per acre.

Pastoral Leases.

The administration of the law in respect of pastoral lands is controlled by a Pastoral Board consisting of three members, including the Surveyor-General. Legislation passed in 1899 provides that in future pastoral leases the classification hitherto existing is abolished, and the term of such leases is to be forty-two years, subject to a revaluation of the rent for the second twenty-one years, the rent to be determined by the carrying capacity of the land for the depasturing of stock, the value of

the land for agricultural and other purposes, and the proximity and facilities of approach to railway stations, ports, rivers, and markets. Pastoral leases current at the time of the passage of the legislation referred to are divided into three classes. Class A includes all pastoral lands within district A, the boundaries of which are set out in the Schedule to the Pastoral Act of 1893; class B includes similar land in district B; and class C includes all pastoral lands to the south of the 26th parallel of south latitude, and not included in classes A and B. Leases in classes A and B have a currency of twenty-one years, and in class C of twenty-one years, with a right of renewal for a similar term at a revaluation.

No mining by the lessee is allowed, but he may use the surface of the land for any purpose, whether pastoral or not. Improvements are valued solely in connection with their worth to the incoming lessee, and may in no case exceed in value such as are necessary for the working of a run of 5,000 sheep in Class A, of 10,000 sheep in Class B, or of 30,000 sheep in Class C, or a proportionate number of cattle, five sheep being taken as the equivalent of one head of cattle. Revaluations may be made during the currency of a lease if, by the construction of Government works in the neighbourhood, such as railways and waterworks, the land should have received an enhanced value. Leases are granted to discoverers of pastoral lands, or to any person for inferior lands, for forty-two years—the first five years at a peppercorn rental; the next five years at 1s. per annum per square mile; and the remainder of the term at 2s. 6d. per annum per square mile. For all other leases the minimum rent is fixed at 2s. 6d. per annum per square mile, together with 2d. for each sheep depastured in Classes A and B, and 1d. for each sheep in Class C. Provision is made for the resumption of leases and the granting of compensation. All disputed cases are decided according to the terms of the Arbitration Act, 1891.

A pastoral lessee may surrender his lease for a perpetual lease where the unimproved value of the land comprised therein, together with that of all other lands held by him, does not exceed £5,000, or where, in the opinion of the Commissioner, the land is suitable only for pastoral purposes, and the carrying capacity thereof unimproved, and of all other lands held by the lessee under any tenure does not exceed 5,000 sheep.

In cases where the area held by an outgoing lessee is reduced by subdivision below a certain minimum, the improvements are to be valued for the protection of such lessee as if the area were of the minimum carrying capacity, and any difference between their value and that paid by the incoming lessee is to be borne by the Commissioner. The Commissioner is not bound to recover improvement moneys or to protect improvements, and any moneys paid to an incoming lessee for depreciation of improvements are to be laid out in their repair; but a lessee may be released from the liability to repair improvements provided others in lieu thereof are made to the satisfaction of the Commissioner.

The lessee covenants to stock the land, before the end of the third year, with sheep, in the proportion of at least five head, or with cattle, in the proportion of at least one head, for every square mile leased; and before the end of the seventh year to increase the stock to at least twenty sheep or four head of cattle per square mile, and to maintain the numbers at that rate. In addition, pastoral leases granted subsequent to 28th January, 1899, contain a covenant binding the lessee to expend in improvements such sum, not to exceed 10s. per mile, per annum, as shall be recommended by the Pastoral Board, and approved by the Commissioner, the covenant to cease so soon as an expenditure of at least £3 per mile in improvements has been made on the land.

In cases where the Commissioner is satisfied that the country is waterless or infested with vermin, the covenant relating to stocking the land may be qualified, provided that a sum equal to £5 per square mile of the leased land has been expended in the destruction of vermin or in the construction of water improvements. Where artesian water yielding not less than 5,000 gallons per diem is discovered, the lessee is entitled to a remission of five years' future rent in respect of an area of 100 square miles surrounding such well, but this concession cannot be claimed on account of more than four wells on any one run.

Forfeiture of a lease does not take effect until after three months' notice has been given to the lessee, who may thereupon apply for relief to the Tenants' Relief Board, which consists of a Judge of the Supreme Court assisted by two assessors. After consideration of all matters affecting the question, the Board may determine as they think fit.

Working-men's Leases.

A new feature has been introduced into the land legislation of the colony, in response to the claims of the working classes. It is enacted that certain lands of the province may be surveyed into blocks exceeding 20 acres in area, so long as the unimproved value does not exceed £100, and leased under the conditions affecting leases granted with the right of purchase and perpetual leases. No one except a person who gains his livelihood by his own labour, and who has attained the age of 18 years, is entitled to a working-man's lease. Either husband or wife may hold a working-man's block, but not both at the same time. The rent is payable annually in advance. The lessee is bound to reside on the land for at least nine months in every year, but residence by his wife or any member of his family is held as a fulfilment of the residential condition. Working men's leases situated within a radius of 10 miles from the Post Office, Adelaide, cannot be taken up with the right of purchase.

Exchange of Lands.

Crown lands may be exchanged for any other lands, notwithstanding the existence of any lease that may have been issued in connection with the former. The Crown lands proposed to be given in exchange may be granted in fee simple or under perpetual lease.

Village Settlements.

Twenty or more persons of the age of eighteen and upwards may form an association for the purpose of founding a village settlement. The memorandum, on approval of the Commissioner, is deemed to be registered, and the association becomes a corporate body, with the right to sue and to be sued. The proclamation sets forth the name, situation, and boundaries of the village; the names of the villagers and of the trustees of the association; the maximum area to be allotted to each villager; and the nature and aggregate value of the improvements to be made on the land, and the period within which they are to be effected. Within two months of the publication of the proclamation constituting a village, the Commissioner is to issue to the association a perpetual lease thereof. The conditions attached are that, after the first six months from the date of issue of the lease, at least one-half of the villagers shall reside upon and utilise the land in the manner prescribed; that during each of the first ten years the sum of 2s. per acre at least shall be expended in improvements, which are to be kept in good repair; and that the lands are not to be sub-let. The Commissioner may make advances to registered associations, to the extent of £100 for each villager, for the purchase of tools or to effect improvements, such advances to be repaid in ten equal yearly instalments, with interest at the rate of 5 per cent. per annum. Power is vested in the Commissioner to expel from an association any villager who has become liable to expulsion under the rules; to control and direct the expenditure of any money advanced; to call upon a trustee to resign where the welfare of the association calls for such action; and to require an association to increase the number of villagers so that it may not be less than the number who signed the rules when first registered—the total to be not more than 500.

Registration of Homesteads.

The Homestead Act of 1895 has for its object a simple method of securely settling homesteads for the benefit of settlers and their families. It is essential that applicants for the registration of their homesteads should be residing, and have resided for at least one year prior to making the application, on the land to be registered. Homesteads with improvements thereon of the value of more than £1,000, or in respect of which the applicant is not either the owner of an unencumbered estate in fee-simple or the holder of a perpetual lease from the Crown, are not eligible for registration. The effect of registration is to settle the homestead for the benefit of the settler and family until the period of distribution, either under his will, or when his children have all attained the age of 21 years. No alienation or attempted alienation by the settler or his family has any force or effect other than as provided for, and their interest continues unaffected to the value of £1,000 only. Provision is made for the leasing of the homestead, but for no period longer than three years. Registration

may be rescinded should the settler become bankrupt or make an assignment for the benefit of his creditors within twelve months from the date of registration; and a similar course may be adopted in the event of his death within a like period and should it be shown that the estate is insufficient for the payment of his debts and liabilities without recourse to the homestead. The Act applies to land brought under the provisions of the Real Property Act of 1886, as well as to land not subject to that Act.

Closer Settlement.

With a view to the encouragement of closer settlement in the public interest by facilitating the acquisition by the Crown of large estates for subdivision and letting for agricultural purposes at reasonable rents, power is given to the Commissioner to acquire such. The price to be paid for lands compulsorily taken is not to exceed the unimproved value of the land, together with the value of the improvements thereon, with an additional 10 per cent. for compulsory resumption.

Mining Areas.

Provision is made for the issue of business and occupation licenses. Business claims cannot be more than $\frac{1}{4}$ acre in townships nor more than 1 acre on other lands, and they must not be situated within 5 miles of any Government township, except they come within a gold-field. The cost of a business license is 10s. for six months or £1 for a year. Occupation licenses of blocks not exceeding $\frac{1}{2}$ acre are granted for a period of fourteen years, at an annual rental of 2s. or less.

The Northern Territory.

The Northern Territory of South Australia includes the whole of the lands situated to the north of the 26th degree of south latitude, bounded by Queensland on the east, Western Australia on the west, and the Ocean on the north. This portion of the Continent is under the administration of a Resident, appointed by the Government of South Australia; and the alienation and occupation of lands within the Territory are conducted under regulations enacted by the South Australian Legislature, in accordance with the Northern Territory Crown Lands Consolidation Act of 1882.

It is provided that lands may be purchased for cash, without conditions, in blocks not exceeding 1,280 acres, for 12s. 6d. per acre. They may also be bought under the deferred payment system to the same maximum area, and at the same price, payable in ten years, together with an annual rent of 6d. per acre.

Leases for pastoral occupation may be issued for a term not exceeding twenty-five years, for blocks up to 400 square miles, the annual rental for the first seven years being 6d. per square mile, while 2s. 6d. per square mile is charged during the remainder of the term.

In order to encourage the cultivation of tropical produce, such as rice, sugar, coffee, tea, indigo, cotton, tobacco, etc., special provisions have been enacted. Blocks of 320 acres to 1,280 acres may be let for such purposes at the rate of 6d. per acre per annum. If, on the expiration of five years, the lessee can prove that he had cultivated one-fifth of his area by the end of the second year, and one-half by the end of the fifth year, he is relieved from all further payment of rent, and the amount already so paid is credited to him towards the purchase of the land in fee.

Western Australia.

The first regulations referring to land settlement in Western Australia were issued by the Colonial Office in 1829, at the time when Captain James Stirling was appointed Civil Superintendent of the Swan River settlement. The first special grants were made in favour of Captain Stirling himself for an area of 100,000 acres near Geographe Bay; and of Mr. Thomas Peel, for 250,000 acres on the southern bank of the Swan River and across the Channing to Cockburn Bay—Mr. Peel covenanting to introduce at his own cost 400 immigrants into the colony by a certain date. Persons proceeding to the settlement at their own cost, in parties in which the numbers were in the proportion of five females to every six male settlers, received grants in proportion to the amount of capital introduced, at the rate of 40 acres for every sum of £3. Capitalists were granted land at the rate of 200 acres for every labouring settler introduced at their expense, but these grants were subject to cancellation if the land was not brought into cultivation or reclaimed within twenty-one years. These regulations were amended by others of a similar nature, issued on the 20th July, 1830. In 1832, however, the mode of disposing of Crown lands by sale came into force, the regulations issued in that year assimilating the system of settlement to that in force in the colonies of New South Wales and Van Diemen's Land. Other alterations were made from time to time, until in October, 1898, an Act amending and consolidating the laws relating to the sale, occupation, and management of Crown lands received assent.

For the purposes of administration, the Colony is divided into six divisions, namely, the South-west Division, the Western Division, the North-west Division, the Kimberley Division, the Eucla Division, and the Eastern Division. Land may be acquired in the following manner:—(1) By auction of town and suburban lands in all divisions, at an upset price to be determined by the Governor; (2) by conditional purchase—(*a*) by deferred payments with residence within agricultural areas in all divisions; (*b*) by deferred payments with residence on any land other than agricultural in the South-west Division; (*c*) by deferred payments with residence on any land within 40 miles of a railway within the Eastern and Eucla Divisions, at a price of not less than 10s. per acre, payable in twenty yearly instalments, and in areas not exceeding 1,000 acres nor less than 100 acres; (*d*) by deferred payments without resi-

dence within an agricultural area, also over any other land within the South-west Division, or within 40 miles of a railway within the Eastern and Eucla Divisions, which may from time to time be declared open to selection; (*e*) by direct payment without residence within agricultural areas of not less than 100 acres nor more than 1,000 acres, at a price of not less than 10s. per acre, 10 per cent. of which is to be paid on application and the balance within twelve months of date of the commencement of the license, by four equal quarterly instalments; (*f*) by direct payment without residence, for gardens, in all divisions, of areas of not less than 5 nor more than 50 acres, at not less than 20s. per acre; (*g*) of poison lands; (*h*) working-men's blocks; (*i*) free homestead farms.

Auction Lands.

Town and suburban lands in all divisions may be sold by public auction, at an upset price to be determined by the Governor-in-Council. Any person may apply to the Commissioner to put up for sale by auction any town or suburban lands already surveyed, on depositing 10 per cent. of the upset price, which is returned if such person does not become the purchaser. Should the purchaser not be the applicant, he must pay 10 per cent. on the fall of the hammer, the balance of the purchase money to be paid as provided by regulation. All suburban land is sold subject to the condition that each lot shall, within two years from the date of sale, be enclosed with a fence of a prescribed description.

Conditional Purchase.

In all the divisions, agricultural areas of not less than 2,000 acres are set apart by the Governor-in-Council. The maximum quantity of land which may be held by any one person is 1,000 acres, and the minimum 100 acres. The price is fixed at 10s. an acre, payable in twenty yearly instalments of 6d. an acre, or sooner, in the occupier's option. Upon the approval of an application, a lease is granted for twenty years. Within six months the lessee must take up his residence on some portion of the land; and make it his usual home without any other habitual residence, during, at least, six months in each year for the first five years. The lessee must within two years from the date of the commencement of his lease fence at least one-tenth of the area, and within five years enclose the whole of the land, and must, within ten years, expend upon the land, upon prescribed improvements, in addition to the exterior fencing, an amount equal to the full purchase money. After the lease has expired, provided that the fence is in good order, and the improvements have been maintained, and the full purchase money has been paid, a Crown grant is given.

Land may be purchased outside agricultural areas in the South-west Division, also within 40 miles of a railway within the Eastern and Eucla Divisions, by free selection, on deferred payments with residence, and otherwise subject to all the conditions required within agricultural areas as already stated.

Under the fourth mode of purchase, the applicant is subject to all the conditions, except that of residence, imposed under the first mode, but he has to expend twice the amount on improvements in lieu of residence.

By the fifth mode, land of a minimum extent of 100 acres and a maximum of 1,000 acres, within an agricultural area, and not more than 5,000 acres outside an agricultural area, may be applied for at a price (not less than 10s. per acre) fixed by the Governor-in-Council. Within three years the land must be enclosed, and within seven years a sum equal to 5s. per acre must be spent on improvements, in addition to the exterior fencing.

For garden purposes, small areas of not less than 5 acres nor more than 50 acres (except in special cases) may be purchased within all divisions at 20s. per acre on condition that within three years the land shall be fenced in, and one-tenth of the area planted with vines or fruit-trees or vegetables.

Lands infested with poisonous indigenous plants, so that sheep or cattle cannot be depastured thereon, are available for conditional purchase, in areas of not more than 10,000 acres nor less than 3,000 acres, at a price not less than 1s. per acre, payable half-yearly, at the rate of one-thirtieth of the total purchase money per annum. Upon approval of the application, a lease for thirty years is granted, subject to the conditions that the lessee shall, within two years, fence one-tenth, and within five years enclose the whole area, with a fence of the prescribed description, and, during the term of his lease, eradicate the whole of the poisonous indigenous plants. At the expiration of the lease, or at any time during the currency of the same, provided all the conditions have been complied with, the fencing properly maintained, and the full balance of the purchase money and fees have been paid, and provided that the land has been rendered safe for depasturing cattle and sheep at all seasons, and has continued so for a term of two years, a Crown grant of the land issues. A pastoral lessee has the first right to select land within his lease under this mode.

Every person who does not own land within the colony in freehold, or under special occupation, or conditional purchase, or a homestead farm, who is the head of a family, or a male who has attained the age of 18 years, is entitled to obtain a lease of lands set apart for workingmen's blocks. The maximum area that may be selected by one person is, if within a gold-field, ½ an acre, or 5 acres elsewhere. The price of the land is not less than £1 per acre, payable half-yearly, at the rate of one-tenth of the total purchase money per annum. The application is to be accompanied by a deposit of half a year's rent, and, on approval, a lease for ten years issues. Within three months from the date of the lease, the lessee must take personal possession and reside upon it during at least nine months in each of the first five years of the lease; possession and residence may, however, be performed by the lessee's wife or a member of his family. Within three years the land must be fenced, and within five years an amount equal to double the full purchase

money, in addition to his house and exterior fencing, must be expended on the land in prescribed improvements. At the expiration of the lease, provided all the conditions have been complied with, and the fencing and improvements maintained, and the full purchase money and fees paid, a Crown grant issues.

Any person who does not already own more than 100 acres of land within the colony, in freehold or conditional purchase, and being the head of a family, or a male who has attained the age of 18 years, may apply for a free homestead farm of not more than 160 acres, from lands declared open for such selection within the South-west Division, and within 40 miles of a railway in the Eastern or Eucla Division, not being within a gold-field. The application is to be accompanied by a statutory declaration and a fee of £1, and, upon approval, an occupation certificate authorising the applicant to enter upon and take possession of the land for the term of seven years is issued. Within six months from the date of the occupation certificate, the selector must take personal possession of the land, and reside upon it for at least six months in each year for the first five years of the term. Within two years from the date of the certificate, a habitable house must be erected of not less than £30 in value, or the selector must expend £30 in clearing, or clearing and cropping, or prepare and plant 2 acres of orchard and vineyard. Within five years, one-fourth of the land must be fenced and one-eighth cleared and cropped. Within seven years, the whole must be enclosed, and at least one-fourth cleared and cropped. At the expiration of seven years, provided the conditions have been complied with, a Crown grant issues on payment of the usual fees.

Pastoral Lands.

Pastoral lands are granted on lease, which gives no right to the soil or to the timber, except for fencing and other improvements on the land leased, and the lands may be reserved, sold, or otherwise disposed of by the Crown during the term. The following are the terms of pastoral leases in the several divisions; all leases expire on the 31st December, 1928, and the rental named is for every 1,000 acres:—South-west division.—In blocks of not less than 3,000 acres, at 20s. per annum for each 1,000 acres or part of 1,000 acres; if, however, the land is in that part of the division situated eastward of a line from the mouth of the Fitzgerald River in the direction of Mount Stirling, the rental is 10s. per annum for each 1,000 acres or part thereof. Western and North-west division.—In blocks of not less than 20,000 acres, at 10s. per annum for each 1,000 acres or part thereof. Eucla division.—In blocks of not less than 20,000 acres, at 5s. per annum for each 1,000 acres or part thereof. Eastern division.—In blocks of not less than 20,000 acres, at the following rental:—For each 1,000 acres or part thereof, 2s. 6d. for each of the first seven years, and 5s. for each of the remaining years of the lease. Kimberley division.—In blocks of not less than 50,000 acres when on a frontage, nor less than 20,000

acres when a part of the boundary is on a frontage, at a rental of 10s. per annum for each 1,000 acres or part thereof. Any lessee in the Kimberley Division, or in that part of the south-west division situated to the eastward of a line from the mouth of the Fitzgerald River in the direction of Mount Stirling may obtain a reduction of one-half the rent due for the remaining years of his lease, who at any time during its term shall have in his possession within the division ten head of sheep or one head of large stock for each 1,000 acres leased. Except in the south-western division, a penalty of double rental for the remaining portion of the lease is imposed, should the lessee within seven years, have failed to comply with the stocking clause.

Any Crown land within a gold-field or mining district, not required to be reserved for any public purpose, may be leased for pastoral purposes in blocks of not less than 2,000 acres at a rental of 10s. per 1,000 acres. In the event of the land, or any portion of it, being taken for an agricultural area, the lessee is only entitled to three months notice.

Resumption of Lands.

The Lands Resumption Act of 1894 provides for the resumption of land for the public purposes set out in detail therein. The manner in which the resumption is to be made is set forth, and on the publication of the Order in Council the land becomes vested in Her Majesty, compensation being based on the probable and reasonable price for which the fee-simple with any improvements upon the land may be expected to sell at the time of resumption, except in those cases where the Crown is entitled to resume under the provisions of the grant. The provisions of certain sections of the Railways Act of 1878, and amendments thereto, are held to be applicable to the methods of settling compensation or arbitration in respect of lands so resumed.

Mining Area.

Business licenses may be issued to any person, not being an Asiatic or African alien, on payment of the prescribed fee, and the licensee is entitled to occupy an area not exceeding 1 acre for residential and business purposes, with right of transfer.

TASMANIA.

In the earlier period of the occupation of Tasmania, from 1804 to 1825, the island was administered as a part of New South Wales, and its settlement was subject to the regulations affecting the disposal of the Crown domain in that colony. After its constitution under a separate administration, the regulations issued from the Colonial Office for the settlement of the Crown lands in the mother colony were made applicable also to Tasmania. New measures were introduced after self-government had been granted to the province, but they became so complicated and cumbersome that in 1890 the necessity was felt of passing an Act consolidating into one comprehensive and general measure the twelve Acts then in force.

The business of the Lands and Survey Departments is now transacted by virtue of the Crown Lands Act of 1890, under which, for the convenience of survey operations, the island is divided into fourteen districts. Lands of the Crown are divided into two classes—town lands and rural lands, the latter being further subdivided into first-class agricultural lands and second-class lands. Lands which are known to be auriferous or to contain other minerals, and such lands as may be necessary for the preservation and growth of timbers, are dealt with under separate sections ; and the Governor-in-Council is empowered to reserve such lands as he may think fit for a variety of public purposes.

Land may be acquired in the following manner :—(1) By selection of rural lands in areas of not less than 15 nor more than 320 acres, at an upset price of £1 per acre, with one-third added for credit; (2) by selection of rural lands of not less than 15 nor more than 50 acres, at an upset price of £1 per acre, with one-third added for credit; (3) by selection of lands within mining areas—if situated within 1 mile of a town reserve, of an area of not less than 1 nor more than 10 acres ; and if at a greater distance than 1 mile, of not less than 10 nor more than 100 acres—the upset price of first-class lands being not less than £1 per acre, payable in fourteen years, and that for second-class lands not less than 10s. per acre, payable in ten years ; (4) by auction—(*a*) of town lands at the upset price notified in the *Gazette*, (*b*) of second-class lands at an upset price of 10s. per acre in lots of not less than 30 nor more than 320 acres, (*c*) of rural lands at an upset price of not less than £1 per acre (maximum area 320 acres), (*d*) of lands within mining areas in areas of not less than 1 nor more than 100 acres at an upset price of not less than £1 per acre, payable in fourteen years ; (5) by after-auction sale of rural lands previously offered at auction and not bid for, at the upset price notified in the *Gazette*.

In the rural division any person of the age of 18 years may select by private contract at the price and upon the terms set forth hereunder :—

One lot of rural lands not exceeding 320 acres nor less than 15 acres.

	£	s.	d.
100 acres at 20s.	100	0	0
Add ⅓ for credit	33	6	8
	133	6	8

Payable as follows :—	£	s.	d.			
Cash at time of purchase	3	6	8			
First year	5	0	0			
Second year	5	0	0			
Third year	10	0	0			
And for every one of the eleven successive years to the fourteenth year inclusive at the rate of £10 per annum	110	0	0			
				133	6	8

The same proportions are allowed for any greater or smaller area than 100 acres; but credit is not given for any sum less than £15. Additional selections may be taken up, provided the total area held by one selector does not exceed 320 acres. Selection by agent is not allowed.

Sales of Land on Credit.

Any person of the full age of 18 years, who has not purchased under the Crown Lands Acts, may select and purchase one lot of rural land of not more than 50 acres nor less than 15 acres; and on payment of a registration fee of £1 an authority is issued to the selector to enter upon and take possession of the land, which must be done in person within six months from the date of issue of certificate. The purchase money, which is calculated on the upset price of £1 per acre, together with the survey fee, and with one-third of the whole added for credit, is payable in fifteen annual instalments, the first of which is due in the fourth year of occupation. A condition of purchase is that the selector shall expend a sum equal to £1 per acre in effecting substantial improvements (other than buildings) on the land, or reside habitually thereon for the full term of eighteen years, before a grant deed is issued. Where a purchaser is unable to pay the instalments as they become due, they may be deferred for any period up to five years on payment of interest at the rate of 5 per cent., if all other conditions have been fulfilled; and the selector may take possession of his land as soon as his application has been approved by the Commissioner and the survey fee paid.

The conditions in connection with the credit system are as follow:— The purchaser must commence to make improvements on the expiration of one year from the date of contract, and during eight consecutive years must expend not less than 2s. 6d. per acre per annum, under penalty of forfeiture. Any surplus over 2s. 6d. per acre spent in any year may be set against a deficiency in another year, so that £1 per acre shall be spent in the course of the eight years. In the event of improvements to the full amount being made before the expiration of the eight years, the purchaser may pay off any balance due, discount being allowed. Payment of instalments may in certain cases be postponed, but under such circumstances interest must be paid at the rate of 5 per cent. per annum. In certain cases the time for making the improvements may be extended for two years. Should an instalment not be paid within sixty days after becoming due, the land may be put up to auction, the defaulter having the privilege of redeeming his land up to the time of sale by payment of the amount due, with interest and costs. If land sold at auction by reason of default should realise more than the upset price, the excess is handed to the defaulter. Land purchased on credit is not alienable until paid for, but transfers are allowed. For five years after alienation land is liable to be resumed for mining purposes, compensation being paid to the occupier. All grant-deeds contain a reservation by the Crown of the right to mine for minerals.

Second-class lands may be sold by auction at the upset price of 10s. per acre in lots of 30 to 320 acres, the latter being the maximum quantity which any one purchaser can hold under the Act on credit. One-half of the purchase money is to be expended in making roads. Improvements, other than buildings, to the value of 5s. per acre are to be effected by the purchaser, beginning at the expiration of one year from the date of contract, and to be continued for the next five years at the rate of 1s. per acre per annum, the deed of grant issuing only when the amount of 5s. per acre has been expended. Non-fulfilment of the conditions entails forfeiture. Where the purchaser has fulfilled the conditions, but is unable to complete the purchase of the whole, a grant may issue for so much as has been paid for upon the cost of survey being defrayed. On approval of the application by the Commissioner and payment of the survey fee the selector may at once enter into possession.

Rural lands not alienated and not exempt from sale may be sold by auction. Town lands are sold only in this way. £1 per acre is the lowest upset price, and agricultural lots must not exceed 320 acres. Lands unsold by auction may be disposed of by private contract. No lands may be sold by private contract within 5 miles of Hobart or Launceston.

Mining Areas.

Mining areas may be proclaimed, within which land may be selected or sold by auction, in lots varying with the situation—from 1 to 10 acres if within a mile from a town, and up to 100 acres if at a greater distance. In such cases residence for five years is required, and in default the land is forfeited to the Crown. Occupation licenses are granted to holders of miners' rights or residence licenses for cultivation or pasture within areas withdrawn from the operation of the Crown Lands Act, in lots of not more than 20 acres, for a period of two years at 5s. per acre, on terms prescribed by regulation, and an area not exceeding ¼ of an acre may be sold by auction, the person in occupation having a preferential right of private purchase at the upset price fixed by the Land Commissioner. A deposit of one-sixth of the purchase money must be made on the approval of the sale, the balance to be paid in eleven equal monthly instalments.

Land selected or bought within a mining area is open to any person in search of gold or other mineral, after notice has been given to the owner or occupier, to whom compensation must be made for damage done. Persons who occupy land in a mining town, under a business license, and who have made improvements to the value of £50, may purchase one quarter of an acre at not less than £10 nor more than £50, exclusive of the value of improvements and cost of survey and deed fee.

Residence licenses may be issued to mining associations for a period of 21 years at 10s. for each year of the term. The same party may hold two licenses if the areas are 5 miles apart.

Grazing Leases.

Grazing leases of unoccupied country may be offered at auction, but such runs are liable at any time to be sold or licensed, or occupied for other than pastoral purposes. The rent is fixed by the Commissioner, and the run is put up to auction, the highest bidder receiving a lease for fourteen years. The lessee may cultivate such portion of the land as is necessary for the use of his family and establishment, but not for sale or barter of produce. Should any portion of the run be sold or otherwise disposed of, a corresponding reduction may be made in the rent, which is payable half-yearly in advance. A lease is determinable should the rent not be paid within one month of becoming due. In the event of the land being wanted for sale or any public purpose, six months' notice must be given to the lessee, who receives compensation for permanent improvements. Leases for not more than fourteen years may be granted for various public purposes, such as the erection of wharfs, docks, etc. Portions of a Crown reserve may also be leased for thirty years for manufacturing purposes.

NEW ZEALAND.

The first settlements in New Zealand were founded upon land obtained from the various native tribes, and the task of distinguishing between the few *bona-fide* and the numerous bogus claims to the possession of land thus acquired was the first difficulty which confronted Captain Hobson when, in 1840, he assumed the government of the colony. Trading in land with the natives had, from 1815 to 1840, attained such proportions that the claims to be adjudicated upon covered 45,000,000 acres—the New Zealand Company, of which Mr. Edward Gibbon Wakefield, of South Australian fame, was the managing director, claiming an estate of no less than 20,000,000 acres in area. In the year 1840, the Legislature of New South Wales passed a Bill empowering the Governor of that colony to appoint a Commissioner to examine and report upon all claims to grants of land in New Zealand—all titles, except those allowed by Her Majesty, being declared null and void. This Bill, before receiving the Royal assent, was superseded by an Act of the local Council, passed in 1841, under which the remaining claims were settled, and new regulations were adopted for the future disposal of the Crown lands. When, later on, the colony became divided into independent provinces, each district had its own regulations, but in 1858 an Act was passed by the General Assembly embodying all the regulations under which land could be alienated or demised in the various provinces of the colony. This Act was repealed in 1876, and the enactments of 1885, 1887, and 1888 which followed have been superseded by the Lands Act of 1892 and its Amending Acts of 1893, 1895, 1896, 1897 and 1899, under which the Crown lands are now administered. For convenience the colony is divided into ten land districts, each being under the direction of a local commissioner and a land board.

Classification of Lands.

Crown lands are divided into three classes :—1. Town and village lands, the upset prices of which are respectively not less than £20 and £3 per acre. Such lands are sold by auction. 2. Suburban lands, being lands in the vicinity of any town lands, the upset price of which may not be less than £2 per acre. These lands are also sold by auction. 3. Rural lands, being lands not reserved for towns and villages, classified into first and second-class lands, which may be disposed of at not less than £1 per acre for first-class, and 5s. an acre for second-class lands. Such lands may be either sold by auction after survey, if of special value, as those covered with valuable timber, etc., or be declared open for application as hereafter described. Pastoral lands are included within the term "rural lands," and are disposed of by lease. No person can select more than 640 acres of first-class or 2,000 acres of second-class land, inclusive of any land already held ; but this proviso does not apply to pastoral land.

Mode of Alienation.

Crown lands may be acquired as follows :—(1) At auction, after survey, in which case one-fifth of the price must be paid down at the time of sale, and the balance, with the Crown grant fee, within thirty days ; and (2) by application, after the lands have been notified as open to selection, in which case the applicant must fill up a form and make the declaration and deposit required by the particular system under which he wishes to select.

After lands have been notified as open under the optional system, they may be selected for cash, on condition that first-class lands shall within seven years be improved to the amount of £1 per acre, and second-class lands to the amount of 10s. per acre. One-fifth of the price is payable at the time of application, and the balance within thirty days, if the land is surveyed ; or if the land is unsurveyed, the survey-fee, which goes towards the purchase of the land, and the balance within thirty days of notice that survey is completed. A certificate of occupation issues to the purchaser on the final payment being made, and is exchanged for a Crown grant so soon as the Board is satisfied that the improvements have been completed.

After notification, lands may be selected for occupation, with right of purchase, under a license for twenty-five years. At any time subsequent to the first ten years, and after having resided on the land and made the improvements hereafter described, the licensee can, on payment of the upset price, acquire the freehold. If not purchased after the first ten and before the expiry of the twenty-five years of the term, the license may be exchanged for a lease in perpetuity. The rent is 5 per cent. on the cash price of the land. A half-year's rent must be deposited with the application, if for surveyed land, and this sum represents the six months' rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the

cost of survey is to be deposited, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey. Residence on and improvement of the land are compulsory, as hereafter described. Land held on deferred payment may be mortgaged under the Government Advances to Settlers Act of 1894.

Perpetual Leases.

Lands notified under the optional system may be selected on a lease for 999 years (or in perpetuity), subject to the undernoted conditions of residence and improvements. The rental is 4 per cent. on the cash price of the land. In the case of surveyed lands, the application must be accompanied by half a year's rent, which represents that due on the 1st day of January or July following the date of selection. In the case of unsurveyed lands, the cost of survey must be deposited, and is credited to the selector as so much rent paid in advance, dating from the 1st day of January or July after thirty days' notice of completion of survey. Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures. Crown lands may be leased to any society for the establishment of industrial, rescue, or reformatory homes, for a period of twenty-one years, with perpetual right of renewal at an annual rental of 5 per cent. on the capital value, subject to such conditions as the Minister may deem fit to prescribe. In the event of default, the land, with any improvements thereon, reverts to the Crown.

Conditions of Tenure.

Under all systems—excepting cash purchases or pastoral and small grazing-run leases—residence and improvements are the same. Residence is compulsory (with a few exceptions mentioned in the Act), and must commence on bush or swamp lands within four years, and on open or partly open lands within one year from the date of selection. On lands occupied with a right of purchase, residence must be continuous for six years in the case of bush or swamp lands, and for seven years in the case of open or partly open lands; on lease in-perpetuity lands it must be continuous for a term of ten years. The Board has power to dispense with residence in certain cases, such as where the selector resides on adjacent lands, or is a youth or an unmarried woman living with his or her parents. The term "residence" includes the erection of a habitable house to be approved of by the Board.

Improvements are the same for all classes of land—excepting cash purchases or pastoral and small grazing-run leases—and are as follow:—Within one year from the date of the license or lease the land must be improved to an amount equal to 10 per cent. of its value; within two years, to the amount of another 10 per cent.; within six years, to the amount of another 10 per cent., making 30 per cent. in all within the six years; and in addition to the foregoing, it must be further improved to the amount of £1 an acre for first-class land, and

for second-class to an amount equal to the net price of the land, but not more than 10s. an acre. Improvements comprise the reclamation of swamps, the clearing of bush, cultivation, the planting of trees, the making of hedges, the cultivation of gardens, fencing, draining, the making of roads, wells, water-tanks, water-races, sheep-dips, embankments or protective works, or the effecting of any improvement in the character or fertility of the soil, or the erection of any building, etc.; and cultivation includes the clearing of land for cropping, or clearing and ploughing for laying down artificial grasses, etc.

Under the existing regulations any group of persons numbering not less than twelve may apply for a block of land of not less than 1,000 acres nor more than 11,000 acres in extent, but the number of members must be such that there shall be one for every 200 acres in the block, and no one may hold more than 320 acres, except of swamp lands, of which the area may be 500 acres. The price of lands within a special settlement is fixed by special valuation, but it cannot be less than 10s. an acre. The rental may not be less than 4 per cent. on the capital value of the land; the tenure is lease in perpetuity. Residence, occupation, and improvements are generally the same as already described, and applications have to be made in the manner prescribed by the regulations.

Improved Farm Settlements.

Special regulations are in force for this class of settlement, and those who form settlements are selected from the applicants by the Commissioner, preference being given te married men. The area of the farms may vary from 10 to 200 acres, according to locality, and no settler can select more than one farm. The land is leased for 999 years at a rental of 4 per cent. on the capital value, to which is added 5 per cent. on the amount advanced by Government for clearing, grassing, etc. Residence for the first ten years is compulsory, and the improvements to be effected are similar to those on perpetual leases.

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follow:—Such settlements may be divided into—(1) Village allotments not exceeding one acre each, which are disposed of either at auction or upon application as already described, with option of tenure, the cash price being not less than £3 per allotment; and (2) homestead allotments not exceeding 100 acres each, which are leased in perpetuity at a 4-per-cent. rental on a capital value of not less than 10s. per acre. Where a village-settlement selector has taken up less than the maximum area prescribed, he may obtain an additional area in certain cases without competition on the same tenure and terms as the original holding. Residence, improvements, and applications are the same as already described. The leases are exempt from liability to be seized or sold for debt or bank-

ruptcy. The Governor is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Grazing Areas.

Small grazing runs are divided into two classes: first-class, in which they cannot exceed 5,000 acres; and second-class, in which they cannot exceed 20,000 acres in area. These runs are leased for terms of twenty-one years, with right of renewal for a like term, at a rent of 2½ per cent. on the capital value of the land, but such capital value cannot be less than 5s. per acre. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Lands Office, together with a deposit of six months' rent, representing that due on the 1st day of March or September following selection. A selector may not hold more than one small grazing run, nor may he hold any freehold or leasehold land of any kind whatsoever over 1,000 acres, exclusive of the area for which he applies under this system The lease entitles the holder to the grazing rights and to the cultivation of any part of the run, and to the reservation of 150 acres around his homestead through which no road may be taken; but the runs are subject to the mining laws. Residence is compulsory on bush or swamp land within three years, and on open land within one year; and it must be continuous to the end of the term, though this latter condition may in certain cases be relaxed. Improvements are necessary as follow:—Within the first year, to the amount of one year's rent; within the second year, to the amount of another year's rent; and within the next four years to the value of two years' rent; making a sum equal to four years' rental to be spent on the run in six years. In addition to this, a first-class run must be improved to an amount of 10s. an acre, and a second-class run to an amount of 5s., if the land be under bush. After three years' compliance with these conditions, the run may be divided among the members of the selector's family who are of the age of 17 years and upwards, and new leases may be issued to them on the terms and subject to the conditions of residence and improvements contained in the original lease.

Pastoral Leases.

Purely pastoral country is let by auction for a term not exceeding twenty-one years; but, except in extraordinary circumstances, no run can be of a carrying capacity greater than 20,000 sheep or 4,000 cattle. Runs are classified from time to time into those which are suitable for carrying more than 5,000 sheep (let as above), and into pastoral-agricultural country, which may either be let as pastoral runs, generally for short terms, or be cut up for settlement in some form. Leases of pastoral-agricultural lands may be resumed without compensation at any time after twelve months' notice has been given. No one can hold more than one run unless it possesses a smaller carrying capacity than 10,000 sheep

or 2,000 cattle, in which case the lessee may hold additional country up to that limit. Runs are offered at auction from time to time, and half a year's rent must be paid down at the time of sale, representing that due in advance on the 1st March or September following; and the purchaser has to make the declaration required by the Act. All leases begin on the 1st March; they entitle the holder to the grazing rights, but not to the soil, timber, or minerals. A lease terminates over any part of the run which may be leased for another purpose, purchased, or reserved. The tenant must prevent the burning of timber or bush, and the growth of gorse, broom or sweet-briar, and destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years. In case it is determined again to lease any run, it must be offered at auction twelve months before expiry of the term, and if, on leasing, it is purchased by some person other than the previous lessee, valuation for improvements, to be made by an appraiser, must be paid by the incoming tenant, to an amount not greater than three times the annual rent, except in the case of a rabbit-proof fence, which is valued separately. Runs may also be divided with the approval of the Land Board. Where a lessee seeks relief, and the application is favourably reported on by the Board, the whole or part of one year's rent payable or paid may be remitted or refunded, or the lease may be extended, or a new lease or license issued in lieu thereof. The Minister may also postpone payment of rent or sheep rate where a tenant has applied or signified his intention of applying for relief.

Acquisition of Land for Settlement.

The administration of the law in respect of the acquisition of land for settlement is vested in a Board styled the Board of Land Purchase Commissioners, and consisting of the Surveyor-General, the Commissioner of Taxes, and the Commissioner of Crown Lands for any district in which it is proposed to acquire land, the Land Purchase Inspector, and a member of the Land Board of the district. The duties devolving upon the Board are to ascertain the value of any lands proposed to be acquired, and to report to the Minister as to their character and suitableness for settlement, and as to the demand for settlement in the locality. Land may be compulsorily taken for the purposes of the Act. The rent of land acquired and disposed of under the Act is at the rate of 5 per cent. on the capital value of the land, and the capital value is to be fixed at a rate sufficient to cover the cost of the original acquisition, together with the cost of survey, subdivision, and making due provision for roads. Where land acquired contains a homestead, a lease in perpetuity of the homestead and land surrounding it, not exceeding 640 acres, may be granted to the person from whom it was acquired, on conditions prescribed, at a yearly rental of 5 per cent. on the capital value of the land, such capital value to be determined in the manner set forth above.

A large area, principally in the North Island, remains in the hands of the native race, and this land may be acquired for settlement after a report upon its character, suitableness for settlement, and value, has been made by a Board specifically appointed for the purpose. On notification, the land becomes Crown land, subject to trust for native owners.

Australasian Settlement.

The particulars given in the foregoing pages will have made the fact abundantly clear that the main object of the land legislation, however variously expressed, has been to secure the settlement of the public estate by an industrious class, who, confining their efforts to areas of moderate extent, would thoroughly develope the resources of the land. But where the character of the country does not favour agricultural occupation or mixed farming, the laws contemplated that the State lands should be leased in blocks of considerable size for pastoral occupation, and it was hoped that by this form of settlement vast tracts which, when first opened up, seemed ill-adapted even for the sustenance of live-stock, might ultimately be made available for industrial settlement. To how small an extent the express determination of the legislators to settle an industrious peasantry on the soil was accomplished will presently be illustrated from the records of several of the provinces; but in regard to pastoral settlement the purpose was fully achieved—large areas, which were pronounced even by experienced explorers to be uninhabitable wilds, have since been occupied by thriving flocks, and every year sees the great Australian desert of the early explorers receding step by step. The following statement shows the area of land alienated by each province, the area leased, and the area neither alienated nor leased at the close of 1899. The term "alienated" is used for the purpose of denoting that the figures include lands granted without purchase. The area so disposed of has not been inconsiderable in several provinces:—

State.	Area.	Area alienated or in process of alienation.	Area leased.	Area neither alienated nor leased.
	acres.	acres.	acres.	acres.
New South Wales	198,848,000	46,856,577	128,034,958	23,956,465
Victoria.....	56,245,760	23,248,563	13,148,701	19,848,496
Queensland	427,838,080	15,641,642	280,801,539	131,394,899
South Australia	578,361,600	14,534,830	260,796,108	303,030,662
Western Australia	624,588,800	6,478,949	95,771,860	522,337,991
Tasmania	16,778,000	4,801,266	1,040,701	10,936,033
Commonwealth ...	1,902,660,240	111,561,827	779,593,867	1,011,504,546
New Zealand	66,861,440	23,520,996	15,091,314	28,249,130
Australasia	1,969,521,680	135,082,823	794,685,181	1,039,753,676

The proportions which these figures bear to the total area of each colony are shown below :—

State.	Area alienated or in process of alienation.	Area leased.	Area neither alienated nor leased.
	per cent.	per cent.	per cent.
New South Wales	23·56	64·39	12·05
Victoria	41·33	23·38	35·29
Queensland	3·66	65·63	30·71
South Australia	2·51	45·09	52·40
Western Australia	1·04	15·33	83·63
Tasmania	28·62	6·20	65·18
Commonwealth	5·86	40·98	53·16
New Zealand	35·18	22·57	42·25
Australasia	6·86	40·35	52·79

The figures in the foregoing table disclose many grounds for congratulation. Of 1,902 million acres which comprise the area of the Commonwealth, 891 millions, or 46·84 per cent., are under occupation for productive purposes, and of an extent of 1,969 millions, the area of Australasia, no less than 929 millions, or 47·21 per cent., are similarly occupied, and there is every probability that this area will be greatly added to in the near future. New South Wales shows the least area returning no revenue, for out of nearly 200 million acres only 24 million remain unoccupied, and much of this is represented by lands which the State has reserved from occupation, and which are used for travelling stock or for various public purposes, including lands reserved for future settlement along the track of the great trunk line of railways. The colony of Tasmania has 65 per cent. of its area unoccupied, the western part of the island being so rugged as to forbid settlement. Settlement in Western Australia is only in its initial stage ; much of the area of the colony is practically unknown, and a large part of what is known is thought to be little worth settlement. Much the same thing was confidently predicted of western New South Wales and South Australia, though, as subsequent events proved, the forebodings were untrue. In South Australia, including the Northern Territory, only 47·60 per cent. is in occupation. New Zealand, favoured also with a beneficent climate, has nearly half its area not utilised, a circumstance entirely due to the mountainous character of its territory.

The practice of sales by auction without conditions of settlement was a necessary part of the system of land legislation which prevailed in most of the colonies ; but this ready means of raising revenue offered the temptation to the Governments, where land was freely saleable, to obtain revenue in an easy fashion. The result of the system was not long in making itself felt, for pastoralists and others desirous of accumulating large estates were able to take advantage of such sales, and of the ready manner in which transfers of land conditionally

purchased could be made, to acquire large holdings, and in this manner the obvious intentions of the Lands Acts were defeated. Notwithstanding failures in this respect, the Acts have otherwise been successful, as will appear from the following table, as well as from other pages in this volume. It is unfortunate that detailed information regarding settlement can only be given for four of the colonies, viz., New South Wales, South Australia, Western Australia, and New Zealand, and that in respect of Western Australia the information is deficient in regard to the area of the holdings. The figures given for New South Wales in the table refer to the year 1900, for South Australia to the Census year of 1891, and for Western Australia and New Zealand to the year 1899 :—

Size of Holdings.	New South Wales.		South Australia.		Western Australia.	New Zealand.	
	Number of Holdings.	Area of Holdings.	Number of Holdings.	Area of Holdings.	Number of Holdings.	Number of Holdings.	Area of Holdings.
		acres.		acres			acres.
1 to 100 acres.....	36,291	1,170,606	6,804	183,443	1,758	36,932	954,825
101 to 1,000 acres.....	26,223	9,176,835	10,618	4,711,060	2,468	22,249	7,089,072
1,001 to 5,000 acres.....	4,323	8,771,007	2,394	4,623,937	494	2,589	5,364,539
5,001 to 20,000 acres.....	927	9,178,648	481	4,737,253	105	589	5,854,396
20,001 acres and upwards..	334	16,789,113	58	1,974,995	22	280	15,123,436
Total.....	68,098	45,086,209	20,355	16,230,688	4,847	62,639	34,386,268

Out of the 45,086,209 acres set down to New South Wales in the foregoing, 40,814,533 acres are in the actual occupation of the owners, and 4,271,676 acres are held under rent. In New Zealand the proportion was not stated at the last Census. In South Australia only 5,510,289 acres are occupied by the owners, while 10,720,399 acres, or 66 per cent., are rented. The most remarkable feature of the table is that in New South Wales about one half the alienated land is owned by 694 persons, in South Australia by 1,283 persons, and in New Zealand by less than 500 persons or companies.

PASTORAL RESOURCES AND DAIRY INDUSTRY.

NOTWITHSTANDING the fact that the soil, climate, and indigenous herbage of Australasia are admirably adapted to the sustenance of animal life, no attempt was made to test the capabilities of the land as a feeding-ground for flocks and herds on a large scale until the example of Captain Macarthur had demonstrated beyond doubt that Nature favoured the production in Australasia of a quality of wool which was unsurpassed by that grown in any part of the world. Then the settlers began to understand and utilise the natural resources of the country; and as the indomitable spirit of exploration gradually opened up the apparently boundless plains of the interior, pastoralists extended their domain, and sheep and cattle in increasing numbers spread over the face of eastern Australia. Now the expansion of the pastoral industry is gradually converting the central and western portions of the continent into holdings devoted to the production of the greatest element of the wealth of Australasia.

The beginnings of pastoral enterprise in Australia were very humble. The live stock of the community which accompanied Captain Phillip comprised only 1 bull, 4 cows, 1 calf, 1 stallion, 3 mares, 3 foals, 29 sheep, 12 pigs, and a few goats; and although the whole of the present flocks and herds of Australasia have not sprung from these animals alone, yet the figures show the small scale on which the business of stock-raising was first attempted. No systematic record of the arrival of stock seems to have been kept in the early days of settlement; but it would appear that during the period between Governor Phillip's landing and the year 1800 there were some slight importations, chiefly of sheep from India. In 1800 the stock in Australasia comprised 6,124 sheep, 1,044 cattle, 203 horses, and 4,017 swine; while at the end of the year 1899 there were in these colonies no less than 93,645,309 sheep, 11,049,065 cattle, 1,932,247 horses, and 1,180,896 swine.

The following figures give the number of stock in Australasia at various dates up to 1851:—

Year.	Sheep.	Cattle.	Horses.	Swine.
1792	105	23	11	43
1800	6,124	1,044	203	4,017
1810	33,818	11,276	1,114	8,992
1821	290,158	102,939	4,564	33,906
1842	6,312,004	1,014,833	70,615	66,086
1851	17,326,021	1,921,963	166,421	121,035

The increase in the number of each kind of live stock since the year 1861 is illustrated in the following table :—

Year.	Sheep.	Cattle.	Horses.	Swine.
1861.....	23,741,706	4,039,839	459,970	362,417
1871.....	49,773,584	4,713,820	782,558	737,477
1881.....	78,063,426	8,709,628	1,249,765	903,271
1891.....	124,547,937	11,861,330	1,785,835	1,154,553
1899.....	93,645,309	11,049,065	1,932,247	1,180,896

The average number of sheep, cattle, horses, and swine per head of the population of Australasia at the same periods was as follows :—

Year.	Sheep.	Cattle.	Horses.	Swine.
1861.....	18·8	3·2	0·4	0·3
1871.....	25·3	2·4	0·4	0·4
1881.....	27·7	3·1	0·4	0·3
1891.....	31·8	3·0	0·5	0·3
1899.....	21·0	2·5	0·4	0·3

It will be seen that in 1861 there were 18·8 sheep for every person in Australasia, and that this number had increased to 31·8 in 1891. In 1899, however, in consequence of the continued dry seasons, and the demands made upon the flocks for the export trade, the average number had fallen to 21·0 per inhabitant. During the thirty-nine years the average number of cattle depastured diminished from 3·2 to 2·5 per head. The breeding of horses and swine has about kept pace with the population.

Sheep.

The suitability for pastoral pursuits of the land discovered in the early days was undoubtedly the means of inducing the infant colony of New South Wales to take its first step on the path of commercial progress, and, looking backward, it is not a little surprising to find how steadily some of the settlers, in the face of the almost insurmountable difficulty of transport which existed a century ago, availed themselves of the opportunities at their disposal. The importation of valuable specimens of sheep from England or the Cape of Good Hope prior to the introduction of steam was at all times attended with great risk, and it frequently happened that many of these costly animals died during the tedious voyage. These enterprises were, however, on the whole successful, and thus the flocks and herds of the colonists surely, if at first slowly, increased and multiplied.

By the year 1795, Captain Macarthur, one of the first promoters of sheep-breeding in New South Wales, had accumulated a flock of 1,000, which were held in great estimation, and gradually increased in value

until, as recorded by an entry in his journal ten years later, the market price of a fat wether had risen to £5. Not satisfied with the natural increase of his flocks, Macarthur sought to improve the quality of his fleeces, by which means he could see opening before him the promise of great wealth and the prospect of establishing important commercial relations with Great Britain. With these ends in view, he procured from the Cape of Good Hope, at great cost and trouble, a number of superior rams and ewes. A happy circumstance favoured his enterprise; for he had the good fortune to secure three rams and five ewes of very fine Spanish breed, which had been presented by the King of Spain to the Dutch Government. These animals, out of a total of twenty-nine purchased at the Cape, arrived in Sydney in 1797, and were disposed of to various breeders. With the exception of Macarthur, however, those who had secured sheep of the superior breed made no attempt to follow up this advantage, being probably amply satisfied with the larger gains from the sale of an increased number of animals. Macarthur, on the other hand, thought little of present profits, and still less of breeding entirely for human consumption. He attentively watched the results of crossing his imported rams with the old stock, and by systematically selecting the finer ewes which were the offspring for further mingling with the sires, he gradually improved the strain, and in a few years obtained fleeces of very fine texture which met with the ready appreciation of English manufacturers. It has been asserted that Macarthur was not the first to introduce merino sheep into Australia; but whether this be so or not, there is no doubt that to him is due the credit of having been the first to prove that the production of fine wool could be made a profitable industry in New South Wales.

Prior to the present century the production of the finest wool had been confined chiefly to Spain, and woollen manufactures were necessarily carried on in England upon a somewhat limited scale, which was not likely to improve in face of certain restrictions which the operatives endeavoured to place upon their employers. These men, in support of their contention that the woollen trade could not be expanded on account of the limited supply of raw material, argued that fine wool was obtainable only in Spain; and it was at this favourable period that Macarthur arrived in England with specimens of the wool obtained from his finest sheep, conclusively proving the capabilities of Australia as a wool-producing country. In this way he opened up with English manufacturers a small trade which, as Australasian wool rose in public estimation, gradually increased until it reached its present enormous dimensions. During his visit to England, Macarthur purchased an additional stock of ten rams and ewes of the noted Spanish breed, nearly equal in quality to those which in 1797 he had procured from the Cape of Good Hope. That these animals were the finest obtainable in Europe may be gathered from the fact they also had formed portion of a present from the King of Spain to George III. After his return to New South Wales, Macarthur patiently continued for many years the process of selection, with such

success that in 1858, when his flock was finally dispersed, it was estimated that his superior ewes numbered fully 1,000. Victoria secured a considerable portion of his flock, and the process of breeding proceeded simultaneously in that and other adjacent colonies.

Although the increase in the numbers of the finer sheep was satisfactory, yet the importation of superior stock was not discontinued, and the stock of the colonies was augmented in 1823 and 1825 by the further introduction of Spanish sheep. Sheep-breeding was about this period commenced in the Mudgee district of New South Wales ; the climate of that region had a more favourable effect upon the quality of the fleeces than that of any other part of the colony, and it was thence that the finest merinos were for a long time procured. As was to be expected, the climate has in some respects changed the character of the Spanish fleece. The wool has become softer and more elastic, and while it has diminished in density it has increased in length, so that the weight of the fleece has only slightly altered. Thus, on the whole, the quality of the wool has improved under the beneficial influence of the climate, and if no further enhancement of its intrinsic value can be reasonably hoped for, there is at least every reason to believe that Australasian wool will maintain its present high standard of excellence.

The following table shows the number of sheep in each colony at intervals of ten years since 1861, and at the end of 1899. In Victoria no live stock returns have been collected since 1894, and the figures for that colony in the last column, therefore, refer to that year :—

State.	Number of Sheep.				
	1861.	1871.	1881.	1891.	1899.
New South Wales...	5,615,054	16,278,697	36,591,946	61,831,416	36,213,514
Victoria	6,239,258	10,002,381	10,267,265	12,928,148	13,180,943
Queensland	4,093,381	7,403,334	8,292,883	20,289,633	15,226,479
South Australia	3,038,356	4,412,055	6,810,856	7,745,541	5,721,493
Western Australia..	279,576	670,999	1,267,912	1,962,212	2,282,306
Tasmania.....	1,714,498	1,305,489	1,847,479	1,662,801	1,672,068
Commonwealth ...	20,980,123	40,072,955	65,078,341	106,419,751	74,296,803
New Zealand...	2,761,583	9,700,629	12,985,085	18,128,186	19,348,506
Australasia.....	23,741,706	49,773,584	78,063,426	124,547,937	93,645,309

In Tasmania alone has the business of sheep-breeding decreased since 1861 ; yet the colony is singularly well adapted for sheep-raising, and its stud flocks are well known and annually drawn upon to improve the breed of sheep in the other colonies. In all the other provinces there has been a material increase in the number of sheep depastured, but more especially in New Zealand, Queensland, and West Australia.

In South Australia the area adapted to sheep is limited, and no great expansion in sheep-farming can be looked for. As regards Victoria, the important strides made by that province in agriculture and kindred pursuits afford sufficient explanation of the slow rate at which its flocks are increasing. The statement given below shows, for 1899, the proportion of sheep in each colony to the total flocks of Australasia. New South Wales, with 38·67 per cent. of the total flock, comes first, and New Zealand, with 20·66 per cent., second, while Queensland, with 16·26 per cent., and Victoria, with 14·07 per cent., are next in order. The other three provinces together possess only a little over 10 per cent. of the whole.

State.	1899.
	per cent.
New South Wales	38·67
Victoria	14·07
Queensland	16·26
South Australia	6·11
Western Australia	2·44
Tasmania	1·79
New Zealand	20·66
Australasia	100·00

In order to show the increase or decrease in sheep during the last fifteen years, the following table has been prepared, giving the numbers in the various colonies at the end of each year since 1885. It will be seen that returns were not collected in some years in Victoria, South Australia, and New Zealand, and that the figures for those provinces are therefore incomplete :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1885	37,820,906	10,681,837	8,994,322	*	1,702,719	1,648,627	16,564,595
1886	39,169,304	10,700,403	9,690,445	*	1,809,071	1,609,046	*
1887	46,965,152	10,623,985	12,926,158	*	1,909,940	1,547,242	*
1888	46,503,469	10,818,575	13,444,005	*	2,112,392	1,430,065	15,468,860
1889	50,106,768	10,882,231	14,470,095	6,432,401	2,366,681	1,551,429	15,503,263
1890	55,986,431	12,692,843	18,007,234	7,050,544	2,524,913	1,619,256	18,128,186
1891	61,831,416	12,928,148	20,289,633	7,745,541	1,962,212	1,664,218	18,570,752
1892	58,080,114	12,965,306	21,708,310	7,209,500	1,685,500	1,623,338	19,380,369
1893	56,980,688	13,098,725	18,697,015	7,325,003	2,200,642	1,535,047	20,230,829
1894	56,977,270	13,180,943	19,587,691	*	2,132,311	1,727,200	19,826,604
1895	47,617,687	*	19,856,959	*	2,295,832	1,523,846	19,138,493
1896	48,318,790	*	19,593,696	6,402,593	2,248,976	1,650,567	19,687,954
1897	43,952,897	*	17,797,883	5,092,078	2,210,742	1,578,611	19,673,725
1898	41,241,004	*	17,552,608	5,076,696	2,251,548	1,493,638	19,348,506
1899	36 213 514	*	15,226,479	5,721,493	2,282,306	1,672,068	19,347,346

* Returns not collected.

The number of sheep in Australia was at its maximum in 1891, every year since then showing a large decrease from the one preceding. New South Wales, however, was responsible for the greater part of the decline, the flocks of the colony being reduced in eight years by 25,617,902. Very large decreases have also taken place in the flocks of Queensland and South Australia. In the other provinces the numbers have been practically stationary for many years.

The total number of sheep (including lambs) slaughtered in the various colonies during the five years ended 1899 is shown below. In South Australia and New Zealand no slaughtering returns are made, while the figures for Tasmania refer to the numbers killed in Hobart and Launceston only.

Year.	New South Wales.	Victoria.	Queensland.	Western Australia.	Tasmania (Hobart and Launceston.)
1895	8,363,003	2,326,002	.....	.....	104,315
1896	6,196,749	2,559,088	1,726,125	420,952	102,966
1897	5,790,103	2,434,519	1,902,735	505,091	107,223
1898	5,665,763	2,352,694	1,262,313	433,867	104,303
1899	4,795,259	.....	1,497,546	.....	93,913

The value of the sheep depastured in Australasia, on the basis of the average prices ruling in 1899, was £45,811,000, thus distributed among the various provinces :—

	£
New South Wales	14,985,000
Victoria	6,067,000
Queensland	6,661,000
South Australia	2,503,000
Western Australia	1,150,000
Tasmania	900,000
Commonwealth	32,266,000
New Zealand	13,545,000
Australasia	£45,811,000

CATTLE.

Except in Queensland, cattle-breeding in the Australasian colonies is secondary to that of sheep. Indeed, in New South Wales in 1899 the number of the herds was even less than in 1861, the decrease amounting to 304,842. The lowest point was reached by that colony in 1885, when the herds only numbered 1,317,315, the result partly of continuous bad

seasons, but principally of the more profitable character of sheep-farming, which had induced graziers on many runs to substitute sheep for cattle. From that period up till 1894, when the herds numbered 2,465,411, there was a gradual improvement, which seemed to indicate a disposition on the part of pastoralists in some parts of the colony to devote more attention to cattle-breeding. But the series of droughts experienced during the last five years has reduced the herds very materially. The progress of Victoria in the breeding of cattle was steady until 1894, the latest year for which information is available.

Queensland, in spite of large losses of late years, due to drought, and the effects of the tick-fever, still holds first place with 45·7 per cent. of the total cattle of the whole group. New Zealand, after having neglected the cattle industry for a long time, has during recent years largely increased its herds, the increase being the result of the special attention bestowed upon the dairy industry.

The following table shows the number of cattle in each colony at ten-year intervals since 1861, and in 1899. The figures for Victoria in the last column refer to 1894 :—

State.	Number of Cattle.				
	1861.	1871.	1881.	1891.	1899.
New South Wales	2,271,923	2,014,888	2,597,348	2,046,347	1,967,081
Victoria	628,092	799,509	1,286,677	1,812,104	1,833,900
Queensland	560,196	1,168,235	3,618,513	6,192,759	5,053,836
South Australia	265,434	143,463	314,918	676,933	526,524
Western Australia	33,795	49,593	63,009	133,690	297,081
Tasmania	87,114	101,540	130,526	167,666	160,204
Commonwealth ...	3,846,554	4,277,228	8,010,991	11,029,499	9,838,626
New Zealand	193,285	436,592	698,637	831,831	1,210,439
Australasia	4,039,839	4,713,820	8,709,628	11,861,330	11,049,065

The statement below shows the proportion of cattle in each colony to the total herds in Australasia, at the end of 1899 :—

State.	per cent.
New South Wales.....	17·8
Victoria	16·6
Queensland.....	45·7
South Australia.....	4·8
Western Australia	2·7
Tasmania.....	1·4
New Zealand	11·0
Australasia	100·0

The previous table shows the growth in the number of cattle during the period extending from 1861 to 1899. A more detailed comparison

for recent years is afforded by the next table, showing the number in each colony at the close of each year since 1885. As will be seen, returns were not collected in three of the provinces—Victoria, South Australia, and New Zealand—for several of the years under review :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1885	1,317,315	1,290,790	4,162,653	*	70,408	138,642	853,358
1886	1,367,844	1,303,265	4,071,563	*	88,254	148,665	*
1887	1,575,487	1,333,873	4,473,716	*	93,544	147,092	*
1888	1,622,907	1,370,660	4,654,932	*	95,822	142,019	853,358
1889	1,741,592	1,394,209	4,872,416	531,296	119,571	150,004	895,461
1890	2,091,229	1,782,881	5,558,264	574,032	130,970	162,440	831,831
1891	2,128,838	1,812,104	6,192,759	676,933	133,690	167,788	*
1892	2,221,459	1,824,704	6,591,416	631,522	162,886	170,085	851,801
1893	2,269,852	1,817,291	6,693,200	675,284	173,747	169,141	885,305
1894	2,465,411	1,833,900	7,012,997	*	187,214	177,038	964,034
1895	2,150,057	*	6,822,401	*	200,091	162,801	1,047,901
1896	2,226,163	*	6,507,377	638,591	199,793	157,736	1,138,572
1897	2,085,096	*	6,089,013	540,149	244,971	157,486	1,209,165
1898	2,029,516	*	5,571,292	613,894	269,947	149,754	1,203,024
1899	1,967,081	*	5,053,836	526,524	297,081	160,204	1,210,439

* Returns not collected.

The number of cattle (including calves) slaughtered during each of the five years ended 1899 is shown in the following table for all the colonies except South Australia and New Zealand, which make no returns. The Tasmanian figures are the numbers killed in Hobart and Launceston only :—

Year.	New South Wales.	Victoria.	Queensland.	Western Australia.	Tasmania. (Hobart and Launceston.)
1895	388,097	236,317	.....	.....	11,245
1896	351,246	245,477	474,946	30,664	9,393
1897	365,898	240,958	498,583	41,665	10,615
1898	364,042	244,319	572,735	33,203	10,029
1899	383,948	....	640,898	.....	10,276

The value of the cattle in Australasia, on the basis of the average prices ruling in 1899, was £52,400,000, thus divided amongst the various provinces :—

	£
New South Wales	10,006,000
Victoria	11,518,000
Queensland	15,372,000
South Australia	3,324,000
Western Australia	1,750,000
Tasmania	1,015,000
Commonwealth	42,985,000
New Zealand	9,415,000
Australasia	£52,400,000

Horses.

Australasia is eminently fitted for the breeding of most descriptions of horses, and attention has long been directed to this industry. At an early period the stock of colonial-bred horses was enriched by the importation of some excellent thoroughbred Arabians from India, and to this cause the high name which was acquired by the horses of Australia was largely due. The abundance of good pasture everywhere obtainable also contributed to this result. The native kangaroo-grass, especially when in seed, is full of saccharine matter, and young stock thrive excellently upon it. This abundance of natural provender permitted a large increase in the stock of the settlers, which would have been of great advantage had it not been that the general cheapness of horses led to a neglect of the canons of breeding. In consequence of the discovery of gold, horses became very high priced. Under ordinary conditions this circumstance would have been favourable to breeding, and such was actually the case in Victoria. In New South Wales, however, it was far otherwise. The best of its stock, including a large proportion of the most valuable breeding mares, was taken by Victoria, with the result that for twenty years after the gold rush the horses of the mother colony greatly deteriorated. One class of stock only escaped—the thoroughbred racer, which was probably improved both by the importation of fresh stock from England, and by the judicious selection of mares.

The colonies are specially adapted to the breeding of saddle and light-harness horses, and it is doubtful whether these particular breeds of Australasian horses are anywhere surpassed. The bush horse is hardy and swift, and capable of making very long and rapid journeys when fed only on the ordinary herbage of the country; and in times of drought, when the grass and water have become scanty, these animals often perform astonishing feats of endurance. Generally speaking, the breed is improving, owing to the introduction of superior stud horses and the breeding from good mares. Where there has been a deterioration in the stock, it has been due to breeding from weedy mares for racing purposes and to the effects of drought.

Although the demand in India is fair, and Australia is a natural market from which supplies may be derived, the speculation of sending horses there is one open to many risks, as, apart from the dangers of the voyage, there is always an uncertainty as to the stock being accepted. Owing, therefore, to the limited foreign demand, it has not been found advantageous to breed horses except for local requirements.

The following table shows the number of horses in each colony at ten-year intervals since 1861, and at the end of 1899. The Victorian figures in the last column refer to 1894, the last year for which returns were collected. In 1899, New South Wales and Queensland possessed nearly equal numbers of horses, with 25 per cent. and 24·8 per cent.

respectively of the total number in Australasia; while Victoria approached them very closely with 22·3 per cent. Of the other colonies, New Zealand possessed 13·6 per cent.; South Australia, 9·3 per cent.; Western Australia, 3·4 per cent.; and Tasmania, 1·6 per cent.:—

State.	Number of Horses.				
	1861.	1871.	1881.	1891.	1899.
New South Wales.....	233,220	304,100	398,577	459,755	482,200
Victoria	84,057	181,643	278,195	440,696	431,547
Queensland	28,983	91,910	194,217	399,364	479,127
South Australia	52,597	78,125	159,678	202,906	180,335
Western Australia ..	10,720	22,698	31,755	40,812	65,918
Tasmania	22,118	23,054	25,607	31,262	31,189
Commonwealth...	431,695	701,530	1,088,029	1,574,795	1,670,316
New Zealand	28,275	81,028	161,736	211,040	261,931
Australasia.....	459,970	782,558	1,249,765	1,785,835	1,932,247

The value of horses in 1899, in the various colonies, is estimated as follows:—

	£
New South Wales	3,856,000
Victoria	5,184,000
Queensland	2,295,000
South Australia	1,260,000
Western Australia	775,000
Tasmania	330,000
Commonwealth	13,800,000
New Zealand	3,406,000
Australasia.....	£17,206,000

Stock-carrying Capacity of Australasia.

None of the colonies is stocked to its full capacity; indeed, in the large territory of Western Australia and in the Northern Territory of South Australia the process has only begun. A clear idea of the comparative extent to which each colony is stocked cannot be given unless the different kinds of animals are reduced to a common value. Assuming, therefore, that one head of large stock is equivalent to ten

sheep, and expressing cattle and horses in terms of sheep, it will be found that the number of acres to a sheep in each colony is as follows :—

State.	No. of acres per sheep.
New South Wales	3·3
Victoria	1·6
Queensland	6·1
South Australia	45·2
Western Australia	105·6
Tasmania	4·7
New Zealand	2·0
Australasia	8·8

The most closely-stocked colony is Victoria, with 1·6 acres per sheep, but this is by no means the limit to the carrying-capacity of that province ; on the contrary, there is still a considerable tract to be brought under the sway of the pastoralist. Neither New Zealand nor New South Wales, with 2·0 and 3·3 acres per sheep respectively, can be said to have reached its full carrying-capacity. If the present average of New South Wales be taken as the possible limit to which Australasia may be stocked, then there is room in these colonies for nearly 500 million sheep or 50 million cattle more than are now depastured. That Australasia could carry 1 sheep to 3 acres, however, is an improbable supposition ; in almost every colony the best land is under occupation, and the demands of the farmer must diminish the area at present at the disposal of the grazier. This will more especially prove true of Victoria, New Zealand, and Tasmania. On the other hand, by resisting the temptation to overstock inferior country, and by increasing the natural carrying-capacity by water conservation and irrigation and by the artificial cultivation of grasses, the colonies in which agriculture has made most progress will be able to carry stock in even larger numbers than they have hitherto attempted. Taking all circumstances into consideration, it may be fairly estimated that under the present system the colonies are capable of maintaining, in ordinary seasons, stock equivalent to 390,000,000 sheep—that is, about 167,000,000 sheep, or their equivalent in cattle, more than are now depastured.

The number of stock in Australasia, expressed in terms of sheep, the number of acres per sheep, and the number of sheep per head of population, at various dates since 1861, were as given below :—

Year.	Sheep.	Cattle, in terms of Sheep.	Horses, in terms of Sheep.	Total.	Acres per Sheep.	Sheep per head of Population.
1861	23,741,706	40,398,390	4,599,700	68,739,796	28·7	54·3
1871	49,773,584	47,138,200	7,825,580	104,737,364	18·8	53·2
1881	78,063,426	87,096,280	12,497,650	177,657,356	11·1	62·9
1891	124,547,937	118,613,300	17,858,350	261,019,587	7·5	67·4
1899	93,645,309	110,490,650	19,322,470	223,458,429	8·8	52·1

Value of Pastoral Property and Production.

The total value of pastoral property in Australasia—that is, of improvements, plant, and stock—was estimated in 1899 at £241,554,000. In this amount the value of stock alone (excluding swine) comes to about £115,417,000. No account is taken of the value of land devoted to pastoral purposes, for though much purchased land is used for depasturing stock, the larger area comprises lands leased from the State, so that a statement which omitted to take into account the value of the State lands would be misleading. The annual return from pastoral pursuits in 1899 was £40,795,000, the share of each colony in the total production being as follows :—

New South Wales	£14,527,000
Victoria	7,219,000
Queensland	7,283,000
South Australia	2,503,000
Western Australia	869,000
Tasmania	687,000
Commonwealth	33,088,000
New Zealand	7,707,000
Australasia	£40,795,000

The products of dairy cattle and swine are not included in the foregoing statement, the figures being given in another place. It should be understood that the values quoted are those at the place of production. The value of the return from each class of stock may be approximately reckoned as follows :—

Sheep	£30,182,000
Cattle	7,748,000
Horses	2,865,000
Total	£40,795,000

Wool.

As might be supposed, the greater part of the value of production from sheep is due to wool. Thus, out of the £30,182,000 shown above, £22,960,000 is the value of wool, viz.:—£22,685,500 for wool exported, and £274,500 for wool used locally. The value of the wool exported, according to the Customs returns, was £23,488,500—that is to say, £803,000 more than the figures shown above. The excess represents the charges for freight, handling, &c., between the sheep-walks and the port of shipment.

In consequence of the decreased production, the value of wool, which had been a diminishing quantity for many years, underwent a complete revolution in 1899, and prices advanced in some cases as much as 60 per cent. above those ruling in 1898, and were higher than for twenty years past, so that, although the clip was still further reduced in consequence of the drought, which had been prolonged for five consecutive seasons, the total return received from wool was nearly

as great as in 1891, the highest year on record. Nearly all the wool produced in Australasia is exported, the home consumption being small, amounting in 1899 to only 1·78 lb., greasy, per head of population; while in Europe and America the quantity of wool available for consumption by the industry amounted to 5·01 lb. per head. During the last two quinquennial periods the consumption of wool in Europe and America has averaged as follows:—

1891–94 ..... 5·12 lb. per head of population
1895–99 ..... 5·19 lb. ,, ,,

The quantity, in the grease, of wool produced by each colony at decennial periods since 1861 and in 1899 was as follows:—

State.	1861.	1871.	1881.	1891.	1899.
	lb.	lb.	lb.	lb.	lb.
New South Wales...	19,254,800	74,401,300	161,022,900	321,416,000	252,907,700
Victoria	27,168,900	63,641,100	67,794,300	69,205,600	64,853,700
Queensland	12,356,100	36,553,200	34,275,300	83,118,100	92,898,000
South Australia.....	13,756,500	28,242,100	46,013,900	50,151,500	37,327,900
Western Australia..	820,500	1,888,000	4,654,600	9,501,700	10,795,300
Tasmania	5,129,100	6,687,800	10,525,100	10,102,900	9,114,800
Commonwealth	78,485,900	211,413,500	324,286,100	543,495,800	467,897,400
New Zealand.....	9,601,700	46,192,300	69,055,600	117,733,500	164,122,700
Australasia.....	88,087,600	257,605,800	393,341,700	661,229,300	632,020,100

The great fall in the production is seen from the above table, which shows that the only colonies where an increase has taken place since 1891 are Queensland, Western Australia, and New Zealand, all the others showing a large decline. The increase in New Zealand has taken place in spite of the heavy demands upon the resources of the colony for the supply of sheep to meet the requirements of the London market in frozen mutton.

The weight of wool per sheep has been increasing regularly in almost every colony, as will be seen from the following table, which shows the weight of clip per sheep at each decennial interval since 1861. It is manifest that the Victorian figures are unreliable, because there is no reason to suppose that there was a decline in the weight of the fleece in 1891; on the contrary, it is known to have been steadily improving; and, again, the 1899 figures are open to doubt. The Western Australian and Tasmanian results also show irregularities, and are omitted from the table. The values for New South Wales and Queensland best represent the increase in the weight of the fleece on the mainland, and the New Zealand figures are also believed to be

correct. In South Australia the weight of wool per sheep is higher than in the other colonies, but the results are derived from the official statistics, and it seems as if the number of sheep in that colony has been under-estimated.

State.	1861.	1871.	1881.	1891.	1899.
	lb.	lb.	lb.	lb.	lb.
New South Wales	3·28	4·57	4·47	5·74	6·53
Victoria	4·52	6·17	6·87	5·68	.....
Queensland	3·40	4·73	4·50	4·73	5·67
South Australia	4·69	6·41	6·93	6·85	6·99
New Zealand	3·48	4·76	5·32	6·42	8·48

The values of the excess of exports over imports in each colony for the same periods were as follows. A careful examination of the figures proves rather conclusively that less care than might have been expected has been taken in stating the values, except in New South Wales and New Zealand, but they are taken from the official records, and are given for what they are worth :—

State.	Excess of Exports over Imports.				
	1861.	1871.	1881.	1891.	1899.
	£	£	£	£	£
New South Wales	1,537,536	4,705,820	7,173,166	10,650,525	10,149,563
Victoria	2,001,681	4,482,461	2,562,769	3,792,938	3,350,351
Queensland	613,074	1,158,833	1,331,869	3,453,548	3,379,179
South Australia	572,720	1,113,825	1,573,313	1,540,079	1,504,901
Western Australia	54,297	122,637	256,690	329,365	423,296
Tasmania	326,413	298,160	498,400	418,460	357,065
Commonwealth	5,105,721	11,882,736	13,396,207	20,184,915	19,164,355
New Zealand	523,728	1,606,144	2,914,046	4,129,686	4,324,171
Australasia	5,629,449	13,488,880	16,310,253	24,314,601	23,488,526

Western Australia and New Zealand were the only colonies to show an increase in the value during the year over that obtained in 1891.

According to returns prepared in London, the number of bales of Australasian wool imported into Europe and America during the year 1899 was 1,641,000, which were valued at £14 10s. per bale, giving a total of £23,794,500. The average price per bale in Sydney during the season 1898–9 was £11 12s. 6d. In comparing these prices, it must be remembered that not only have freight and charges to be added to the Australian value, but some allowance must be made for the difference in the quality and condition of the wool dealt with in the Australian

markets and in London. Large quantities of the inferior portions of the clip intended for sale in the London market are scoured prior to shipment, and the London price is therefore raised to an average considerably higher than the Sydney or Melbourne price with freight and charges added. In 1898, 1,703,000 bales were imported into Europe and America. These were valued at £12 5s. per bale, making the total value £20,861,750, so that, notwithstanding the greatly-diminished import, the total value received was nearly £3,000,000 greater in 1899.

The price per lb. obtained for wool in grease in London at the end of each year from 1890 was as follows :—

Year.	New South Wales. (Average Merino).	Victoria. (Good Average Merino.)	New Zealand. (Average Cross-bred.)
	d.	d.	d.
1890	8½	10	10
1891	7½	9	9½
1892	7	8½	9½
1893	7	8½	9½
1894	6	7¾	8½
1895	7½	9½	9½
1896	7	9	8½
1897	7¼	9	8¼
1898	7¾	9½	7
1899	13	15½	10½

Taking the last fourteen years, the highest prices were realised for New South Wales and Victorian wools during 1899, namely, 13d. per lb. and 15½d. per lb. respectively. The maximum price for New Zealand wool, 11½d. per lb., was obtained in 1889. The lowest prices—6d. for New South Wales, 7½d. for Victoria, and 8d. for New Zealand—were experienced in 1895. The average prices realised during the whole period were 9½d. per lb. for New South Wales average merino, 11½d. for good average Victorian merino, and 9⅛d. for average New Zealand cross-bred. From these figures it will be seen that Victorian wool averages about 2d. per lb. higher than New South Wales wool. The figures must be taken with qualification. Much of the New South Wales wool, the product of the Riverina districts, is exported *via* Melbourne and sold as Port Phillip wool, and brings a price considerably in excess of the average given in the table for the colony of which it is the produce. The quantity of wool sold at the local sales in the Australasian colonies is increasing. Particulars of these sales will be found in the chapter on "Commerce."

The Frozen-Meat Trade.

In view of the large increase in the live stock of Australasia, the question of the disposal of the surplus cast has become a matter of

serious consequence. In New South Wales especially, and in the Riverina district in particular, it was found necessary to have recourse to the old method of boiling down, which a fortunate rise in the price of tallow made it possible to carry on with a margin of profit; but with such prices as have ruled for tallow during the past few years it cannot be said that boiling-down offers any inducement to the pastoralist, although in 1899 the production of tallow in the colony reached the large quantity of 389,838 cwt.

In New Zealand a much better solution of the question of disposal of the surplus cast was found, and a trade in frozen mutton with the United Kingdom has been established on a thoroughly payable basis—an example which some of the other colonies are endeavouring to follow, although considerably handicapped by the want of cross-bred sheep and the prejudice of the English consumer against merino mutton.

The first successful attempt at shipping frozen mutton to England was made in New Zealand in 1882, and since then the trade has attained great proportions, to the immediate benefit of the Colonial producer as well as the English consumer. The trade initiated by the New Zealand Land Company has been extended by the formation of numerous joint stock companies, which now own twenty-one meat-freezing works in the two islands, having an aggregate capacity for freezing about 4,000,000 sheep per year. The sheep are generally killed up country, and transported by rail to the freezing works. Several fleets of steamers are engaged in the trade, and the freight rates charged enable the companies to realise satisfactory profits. The growth of the frozen and preserved meat industries of New Zealand since 1881 is shown in the following table. The shipments are almost exclusively made to the United Kingdom :—

Year.	Frozen or Chilled Meat.						Preserved Meat.	
	Beef.	Mutton.	Lamb.	Mutton and Lamb.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	carcases.	carcases.	cwt.	cwt.	£	lb.	£
1881	....	.....	.....	.....	.....	.....	1,074,640	22,391
1882	....	.....	.....	.....	15,244	19,339	2,913,904	54,397
1883	937	.....	.....	86,995	87,932	118,261	3,868,480	72,778
1884	1,644	.....	.....	252,422	254,066	345,081	3,103,744	59,224
1885	9,170	.....	.....	286,961	296,131	373,326	4,047,904	81,401
1886	9,391	.....	.....	336,405	345,796	426,556	2,592,464	47,426
1887	6,630	656,823	110,816	421,405	428,035	454,942	4,706,016	79,246
1888	44,613	885,843	94,681	507,306	551,919	629,110	4,912,544	86,128
1889	68,298	990,486	118,794	588,524	656,822	783,374	5,325,152	106,772
1890	98,234	1,330,176	279,741	798,625	896,859	1,084,992	6,702,752	136,182
1891	103,007	1,447,583	338,344	889,012	992,019	1,185,122	5,447,904	111,133
1892	55,020	1,316,758	290,996	806,304	861,324	1,021,838	3,939,712	69,420
1893	11,059	1,355,247	475,365	888,455	899,514	1,078,427	2,656,416	46,601
1894	912	1,633,213	459,948	1,001,342	1,002,254	1,162,770	3,368,736	57,325
1895	12,090	1,632,590	735,254	1,078,640	1,090,730	1,214,778	4,124,400	66,137
1896	25,905	1,505,969	792,037	1,065,292	1,091,197	1,239,969	5,006,848	75,661
1897	50,044	1,653,170	1,038,316	1,291,582	1,341,626	1,512,286	5,046,216	78,235
1898	95,218	1,719,282	1,168,883	1,338,175	1,433,393	1,596,543	6,245,792	97,197
1899	172,345	2,102,533	1,272,525	1,557,439	1,729,784	1,965,564	5,382,272	90,919

Amongst the continental colonies the export of meat has reached the largest dimensions in Queensland, although of course it consists chiefly of beef, the trade in mutton only forming one-eighteenth of the whole. So far as they can be given, the figures showing the growth of the Queensland frozen-meat trade, as well as the exports of preserved meat, will be found below :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	cwt.	cwt.	£	lb.	£
1881	.....	.....	.....	.....	2,276,409	39,956
1882	.....	.....	.....	.....	5,689,189	119,343
1883	.....	.....	1,951	2,151	6,729,721	151,001
1884	.....	.....	8,082	11,240	2,298,696	57,101
1885	.....	.....	3,926	5,003	8,306,432	171,432
1886	.....	.....	9,289	12,103	130,658	1,586
1887	.....	.....	.....	.....	5,272,170	99,653
1888	.....	.....	.....	.....	3,964,419	77,887
1889	8,745	15,542	24,287	62,240	853,621	16,743
1890	30,253	23,799	54,052	75,908	2,769,881	44,040
1891	52,609	53,698	106,307	161,345	3,333,317	59,032
1892	123,196	51,595	174,791	276,113	6,035,035	96,828
1893	204,349	21,898	226,247	377,039	8,001,788	143,146
1894	301,837	32,187	334,024	498,652	15,544,826	250,646
1895	461,733	28,221	489,954	580,489	25,941,400	393,492
1896	434,683	31,874	466,557	501,498	21,583,658	330,728
1897	529,162	31,162	560,324	659,260	15,699,098	241,189
1898	511,629	10,935	522,564	672,970	13,188,836	217,684
1899	651,029	32,529	683,558	833,733	25,148,815	383,899

Next to New Zealand, the largest exporter of frozen mutton is New South Wales. During the last few years greater efforts have been made in this colony to expand the trade, and the exports show a considerable increase, although a temporary check was experienced in 1897 in consequence of the unfavourable season. But New South Wales has laboured under the disadvantage of possessing no cross-bred sheep for export, and the food qualities of the merino are scarcely appreciated in the English market, where New Zealand mutton is favourably known, and brings on an average $1\frac{1}{4}$d. per lb. more than Australian. Large tracts of the mother colony, however, are suited to the breeding of large-

carcase sheep, and the pastoralists have become alive to the importance of securing a share of the meat trade of the United Kingdom. Attention is being directed to the introduction of British rams into the colony, and a large increase in the cross-bred flocks has already taken place. Up to the present, however, the cross-bred carcases sent by New South Wales to England have not been kept apart from the merino, and have therefore failed to return the higher prices which might have been expected. The attention of the freezing companies has been directed to this point, but so far without effect. The following table shows the growth of the frozen-meat trade of New South Wales; the exports of preserved meat consist almost wholly of tinned mutton :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	quarters.	carcases.	cwt.	£	lb.	£
1881	.....	.....	9,980	8,554	.....	*176,721
1882	.....	.....	13,782	22,910	.....	*143,601
1883	.....	.....	34,911	43,100	.....	*221,912
1884	.....	.....	13,309	12,321	.....	*161,477
1885	.....	.....	6,271	6,064	.....	*166,561
1886	.....	.....	4,852	4,671	.....	*77,756
1887	.....	.....	21,831	19,310	9,761,154	150,714
1888	.....	.....	52,262	44,537	4,528,269	69,481
1889	.....	.....	37,868	33,426	2,877,303	52,321
1890	.....	.....	72,304	71,534	4,655,523	74,329
1891	.....	.....	105,013	101,828	6,581,713	87,632
1892	.....	.....	223,074	169,425	8,620,747	105,922
1893	4,773	364,958	220,584	141,640	13,092,942	164,592
1894	9,538	533,995	339,404	193,760	16,382,597	206,054
1895	88,719	1,021,006	607,818	380,107	22,384,285	302,828
1896	16,286	1,372,373	642,188	343,397	16,351,936	218,292
1897	28,529	1,065,990	503,925	275,118	10,903,611	147,165
1898	39,593	1,095,568	539,495	330,325	13,930,801	227,288
1899	32,855	956,222	459,553	331,904	11,453,332	185,804

* Including Extract of Meat.

The total capacity of the boiling-down works in New South Wales is stated at 633,900 head of cattle or 16,965,000 sheep; of chilling works, 488,500 head of cattle or 5,422,800 sheep; of freezing works, 76,500 head of cattle or 3,150,000 sheep; and of meat-preserving works, 183,000 head of cattle or 5,445,000 sheep.

The only other colony in which the meat-export trade has reached dimensions of any importance is Victoria, although its exports fall far below those of the three colonies already dealt with. A statement of the Victorian trade from 1881 to 1899 will be found below :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	cwt.	cwt.	£	lb	£
1881	.....	.....	.....	.....	4,026,072	102,306
1882	.....	.....	18,522	18,969	1,274,066	30,705
1883	.....	.....	9,944	12,220	3,225,657	76,015
1884	.....	.....	41,373	53,196	2,667,866	63,707
1885	.....	.....	39,107	61,617	1,486,849	38,244
1886	.....	.....	39,384	70,319	616,652	17,868
1887	.....	.....	15,245	27,270	629,054	14,291
1888	.....	.....	.....	.....	714,856	16,115
1889	.....	.....	.....	.....	805,580	16,156
1890	.....	.....	.....	.....	893,114	20,197
1891	.....	.....	.....	.....	1,052,887	19,230
1892	.....	.....	.....	.....	1,982,151	51,624
1893	.....	.....	1,307	1,838	777,953	14,349
1894	53	27,182	27,235	25,370	2,267,791	40,082
1895	268	24,563	24,831	31,673	2,917,730	43,408
1896	127	23,634	23,761	25,827	4,335,511	71,576
1897	62	21,416	21,478	20,248	5,498,315	84,914
1898	233	7,556	7,789	9,101	2,852,191	38,516
1899	1,458	74,960	76,418	86,087	4,760,047	50,174

There are at present depastured in Australasia 93,645,000 sheep and 11,049,000 cattle, of which 19,348,000 sheep and 1,210,000 cattle are in New Zealand. In that colony the industry of sheep and cattle raising has now reached such a stage that practically the whole of the stock available for market is used up every year either locally or for export, and as a consequence the numbers of both kinds of stock are stationary, and have been so for some years past. In the continental colonies a different state of things prevails. In New South Wales there is a large surplus of sheep beyond the colony's food requirements; while the cast of cattle is below the local demand, and is supplemented by the importation of stock from Queensland, the net import from that colony for the past three years being 482,428 head. The other four colonies have each a deficiency of cattle and sheep.

It is estimated that in an average year the "cast" of cattle is 10·25 per cent.—that is to say, that that percentage of all the cattle depastured would be of marketable age, could they be made fit for slaughtering. Excluding New Zealand, the annual cast would be 1,150,000 head. The present food requirements of the colonies may be set down at 750,000 head, leaving a balance of 400,000 as the surplus available, or which might be made available, for export. At the present time, however, some of the surplus is exported either as chilled beef or

preserved meat, and it is estimated that 130,000 to 150,000 head are annually so disposed of, leaving about 250,000 head, of age fit for market, which it is unprofitable to keep beyond their present age. These comprise the real "surplus" difficulty of the colonies, and it is a question for experts to determine how many of the 250,000 could be fattened for export, but there seems to be abundant evidence that from 60,000 to 100,000 head of cattle could be exported in any ordinary year without trenching upon local requirements, while if the trade could be expanded without touching ruinous prices the export might be made much larger. The surplus of sheep cannot be less than 4,500,000. These figures refer to an ordinary year; in 1899, which was a year of drought, the available cast was doubtless much below the numbers quoted.

Looking at the question from all points of view, it cannot be said that the frozen-meat trade is without strong elements of hope for the future. The great difficulty in the way of an expansion of the trade is the serious fall in prices; but there is no reason why better results should not be obtained if shippers are careful not to export anything of unsatisfactory quality, and so tend to enhance the value of Australian meat in the eyes of the British consumer. Signs are not wanting that the prejudice which existed against frozen mutton in the United Kingdom is fast dying out, and the adoption of the defrosting process, by which the meat may be placed on the market with a much more attractive appearance at an extra cost of $\frac{1}{4}$d. per lb., will hasten its extinction. That it is largely prejudice is made clear by the fact that a great deal of Australian mutton which is sent to London is sold to the consumer as Welsh or English.

During the years 1894 and 1895 several attempts, more or less successful, were made to place live cattle and sheep in the English market. A great difficulty in the way of establishing such a trade was the wildness of the cattle, the mortality in some of the shipments being sufficiently high to provoke strong criticism in England as to the cruelty to which the cattle were subjected by being shipped on such a long voyage. It is to be feared, however, that these expressions of opinion were prompted, not altogether by the alleged sufferings of the cattle, but to a large extent by the interests of the English producer and the American exporter. At the same time, it is clear that a permanent and profitable trade cannot be established until the cattle have been handled sufficiently to bring them into a tractable condition, for the present system of depasturing followed in Australia renders the stock too wild to endure a long stay on shipboard. Probably, however, the great strides made by the Argentine Republic in supplying the English market will make it difficult for Australian shippers to realise a satisfactory margin of profit, the near proximity of that country to Great Britain giving it an immense advantage over these colonies in the matter of freights. In view of the vast population of the United States, any increase in the export of live cattle from that country cannot be anticipated.

Dairy-farming.

Dairy-farming has of late years made fair progress in Australasia, especially in the colonies of New South Wales, Victoria, New Zealand, and, more recently, in Queensland. The introduction of the factory system at convenient centres and the use of the cream-separator have done much to cause the extension of the industry. The number of dairy cows at the end of 1899, and the estimated quantity of milk produced in each colony during that year, were as follow :—

State.	Dairy Cows.	Quantity of Milk produced (estimated).
	No.	gallons.
New South Wales	399,327	138,564,000
Victoria	464,469	193,044,000
Queensland	131,000*	39,300,000
South Australia	84,498	28,351,000
Western Australia	22,500*	6,535,000
Tasmania	41,482	16,669,000
Commonwealth	1,143,276	422,463,000
New Zealand	343,556	138,784,000
Australasia	1,486,832	561,247,000

* Estimated.

The estimated value of the milk and its products, butter and cheese, and of the return obtained from swine, together with the total value of dairy produce for each colony in 1899, will be found below :—

State.	Value of Milk, Butter, and Cheese.	Value of Return from Swine.	Total Value of Dairy and Swine Produce.
	£	£	£
New South Wales	1,743,000	256,000	1,999,000
Victoria	2,491,000	420,000	2,911,000
Queensland	516,000	158,000	674,000
South Australia	365,000	102,000	467,000
Western Australia	69,000	49,000	118,000
Tasmania	157,000	57,000	214,000
Commonwealth	5,341,000	1,042,000	6,383,000
New Zealand	1,770,000	241,000	2,011,000
Australasia	7,111,000	1,283,000	8,394,000

The production of butter and cheese in each colony during 1899 is estimated to have been as follows :—

State.	Butter.	Cheese.
	lb.	lb
New South Wales	33,034,000	2,386,000
Victoria	53,327,000	4,513,000
Queensland	8,463,000	1,910,000
South Australia	5,581,000	947,000
Western Australia	275,000	850
Tasmania	2,094,000	628,000
Commonwealth	102,774,000	10,384,850
New Zealand	30,940,000	13,430,000
Australasia	133,714,000	23,814,850

The colonies having a surplus of butter and cheese available for exportation during 1899 are shown in the following table :—

State.	Butter.	Cheese.
	lb.	lb.
New South Wales	4,549,722	.....
Victoria	36,226,948	638,274
Queensland	1,132,775	.....
South Australia	1,330,714	16,575
New Zealand	15,234,912	7,758,240
Total	58,475,071	8,413,089

New South Wales was formerly both an importer and an exporter of butter, for only during the spring and early summer months was the production larger than the local requirements, while during the remainder of the year butter had to be imported to meet the local demand. Now the colony has become an exporter of butter to the United Kingdom on a fair scale ; but a large quantity of New Zealand butter is still sent to the New South Wales markets on account of the more satisfactory price realised there. There is also an importation from South Australia and Victoria for the supply of the districts adjacent to those colonies. Queensland has only lately become an exporter of butter, 1897 being the first year when the export exceeded the import. The net export in that year was 179,490 lb., which in 1899 had increased to 1,132,775 lb.

The colonies which, on the other hand, were obliged to import butter and cheese during 1899 are shown below :—

State.	Butter.	Cheese.
	lb.	lb.
New South Wales	.....	2,454,260
Queensland	.....	57,974
Western Australia	4,419,448	928,964
Tasmania	598,023	90,590
Total	5,017,471	3,531,788

From the foregoing figures it will be seen that those colonies which produce a surplus of butter and cheese have, after providing for the deficiency of the other provinces, a balance available for exportation to outside countries, this balance in 1899 amounting to 53,457,600 lb. of butter and 4,881,301 lb. of cheese. An export trade in butter and cheese has long been maintained by New Zealand, while in recent years Victorian, New South Wales, and South Australian butters and, more recently still, Queensland butters have been sent to the London market, and their very favourable reception has given a fresh stimulus to the dairying industry in those colonies. The rapidity with which this trade is growing may be gauged from the following table, which shows the quantity of butter exported to the United Kingdom during the eleven years ended 1899 :—

Year.	Exporting State.				
	New South Wales.	Victoria.	Queensland.	South Australia.	New Zealand.
	lb.	lb.	lb.	lb.	lb.
1889	284,251	505,478	.....	.....	2,363,088
1890	589,160	1,286,583	.....	10,850	2,976,848
1891	391,180	3,778,775	.....	23,864	3,246,768
1892	1,532,782	6,446,900	.....	.....	4,648,980
1893	2,846,989	13,141,423	1,064	357,087	5,864,656
1894	4,333,927	22,139,521	.....	1,233,539	6,590,640
1895	1,852,360	21,127,025	31,420	1,017,629	6,181,728
1896	1,741,272	16,452,649	.....	242,872	6,730,304
1897	5,431,109	15,450,857	407,199	16,240	8,943,088
1898	5,309,811	13,548,293	628,296	389,836	9,051,168
1899	7,006,701	26,045,210	741,308	894,992	13,608,224

From latest advices it would appear that the price obtained for Australian butter in London was higher than the rates ruling in the local market ; and as there can hardly be a limit placed to the capacity of Australasia to produce butter and cheese, it is probable that these high prices will have the effect of greatly stimulating the dairy industry throughout all these colonies. In connection with this subject, it may be mentioned that the value of the butter, cheese, and eggs imported

into the United Kingdom during 1899 was £17,213,516, £5,503,004, and £5,044,402 respectively. The supply is chiefly drawn from the Continent of Europe and from America, and of the total amounts mentioned, the only imports from Australasia were butter to the value of £1,853,892, cheese to the value of £72,318, and eggs to the value of £2,078.

It may not be out of place to remark that in one or two of the colonies the export of butter has helped to maintain prices in the local markets, and tended to restrict home consumption. If a season of great prosperity visits Australia there will be a very large increase in the local demand, with a consequent limitation in the supply available for export, so that it may be concluded that under any circumstances the prospects of the industry are encouraging.

Swine.

The breeding of swine is usually carried on in conjunction with dairy-farming, and the following table shows the number of swine in each colony at ten-year intervals since 1861, and in 1899. The Victorian figures in the last column refer to the year 1894, the last in which live-stock returns were collected in that colony :—

State.	Number of Swine.				
	1861.	1871.	1881.	1891.	1899.
New South Wales ...	146,091	213,193	213,916	253,189	239,773
Victoria	43,480	177,447	239,926	286,780	337,588
Queensland	7,465	32,707	56,438	122,672	139,118
South Australia.....	69,286	95,542	120,718	83,797	84,262
Western Australia.....	11,984	14,265	22,530	25,930	55,953
Tasmania.....	40,841	52,863	49,660	73,520	74,451
Commonwealth ..	319,147	586,017	703,188	845,888	931,145
New Zealand.....	43,270	151,460	200,083	308,812	249,751
Australasia.....	362,417	737,477	903,271	1,154,700	1,180,896

The production of swine should be a large factor in dairy-farming, but the increase in the number of pigs has not been as large as might have been expected. In New South Wales and New Zealand the number of swine is actually less now than in 1891, while South Australia and Tasmania show very slight increases. Victoria possesses the largest stock, with 28·6 per cent. of the total number in Australasia ; then come New Zealand and New South Wales with 21·2 per cent. and 20·3 per cent. respectively; Queensland has 11·8 per cent. of the total ; South Australia, 7·7 per cent. ; Tasmania, 6·3 per cent. ; and Western Australia, 4·7 per cent.

The products of the swine—bacon, ham, lard, and salt pork—are now exported by all the colonies with the exception of New South Wales, Western Australia, and Tasmania, as is shown by the following table, which relates to the year 1899 :—

State.	Bacon and Ham.	Salt Pork.	Lard.	Net Value exported.
	£	£	£	£
New South Wales	*10,502	*12	*4,179	*14,693
Victoria	37,406	514	1,454	39,374
Queensland	30,470	208	3,190	33,868
South Australia	3,547	*48	.....	3,499
Western Australia	*83,854	*136	*1,146	*85,136
Tasmania	*2,587	*43	*370	*3,000
Commonwealth	*25,520	483	*1,051	*26,088
New Zealand	14,207	122	330	14,659
Australasia	*11,313	605	*721	*11,429

* Excess of imports.

In the case of Victoria and Queensland small quantities of fresh and frozen pork are included with salt pork. There seems to be considerable scope for an extension of this particular branch of farming in some of the colonies.

Poultry and Minor Industries.

An estimate is given below of the value of the production of poultry and eggs, together with that arising from bee-farming, in each colony during the year 1899 :—

State.	Poultry and Eggs.	Honey and Beeswax.
	£	£
New South Wales	515,000	29,000
Victoria	466,000	7,000
Queensland	205,000	10,000
South Australia	197,000	7,000
Western Australia	131,000	2,000
Tasmania	68,000	3,000
Commonwealth	1,582,000	58,000
New Zealand	321,000	22,000
Australasia	1,903,000	80,000

The most remarkable feature is the trade in eggs between South Australia as supplier and New South Wales, Victoria, and Western Australia as buyers. The returns for 1899 show that during that year

South Australia exported eggs to the value of £62,493, viz., £531 to Victoria, £12,573 to New South Wales, and £49,374 to Western Australia. The bulk of the trade with New South Wales is transacted with the Barrier district, which is commercially a dependency of South Australia.

Pastoral and Dairy Production.

The total value of pastoral and dairy production during the year 1899, in each colony and in the whole of Australasia, together with the value per inhabitant, is shown in the following table :—

State.	Total Value of Pastoral and Dairy Production.	Value per Inhabitant.
	£	£ s. d.
New South Wales	17,070,000	12 13 10
Victoria	10,603,000	9 2 6
Queensland	8,172,000	17 2 9
South Australia	3,174,000	8 12 7
Western Australia	1,120,000	6 12 1
Tasmania	972,000	5 8 1
Commonwealth	41,111,000	11 2 2
New Zealand	10,061,000	13 8 3
Australasia	51,172,000	11 9 10

The following table gives similar information for the years 1871, 1881, and 1891, and shows that in point of total value of production New South Wales, Queensland, Western Australia, and New Zealand have made most satisfactory progress ; while in Victoria, South Australia, and Tasmania the pastoral industry has advanced much more slowly :—

State.	1871.	1881.	1891.
	£	£	£
New South Wales	8,709,000	13,151,000	17,460,000
Victoria	7,260,000	7,499,000	9,321,000
Queensland	1,959,000	4,186,000	7,561,400
South Australia	1,800,000	3,178,000	3,148,525
Western Australia	274,000	431,000	647,350
Tasmania	734,000	1,093,000	1,117,550
Commonwealth	20,736,000	29,538,000	39,255,825
New Zealand	3,210,000	7,096,000	9,153,225
Australasia—Total	23,946,000	36,634,000	48,409,050
Australasia—Per head.	£ s. d. 12 7 7	£ s. d. 13 3 11	£ s. d. 12 12 0

Comparing the two preceding tables, it will be seen that although the total production has more than doubled since 1871 the value per head has slightly decreased. In 1899 the value of pastoral and dairy production was nearly £3,000,000 higher than in 1891; but to a great extent this was due to the high prices obtained last year for the principal articles of pastoral produce; for owing to the continued dry seasons the production of wool was very much less, and the cast of both sheep and cattle was reduced as compared with 1891. On the other hand, the production of butter was larger, and also the export of meat, as will be seen below :—

Produce.	1891.	1899.
Wool, as in grease	Lb. 661,229,000	632,020,000
Cast of sheep	No. 17,000,000	11,611,000
Cast of cattle	No. 1,216,000	1,196,000
Butter produced	Lb. 70,628,000	133,714,000
Meat export.....	Cwt. 1,454,000	3,390,000

The movement in prices will be seen from the following tabulation, which is based chiefly on an analysis of the New South Wales trade. The prices of 1899 are represented by 1,000 :—

Year.	Price Levels of—				
	Wool.	Butter.	Cattle.	Tallow.	Hides.
1891	714	971	1,019	894	827
1892	701	979	1,003	912	706
1893	628	905	826	1,010	626
1894	581	750	634	938	578
1895	646	651	624	868	751
1896	690	915	1,040	781	631
1897	666	908	815	737	829
1898	717	964	1,074	836	881
1899	1,000	1,000	1,000	1,000	1,000

The prices obtained for all these articles, with the exception of cattle, show a large increase for the year 1899. Tallow was only exceeded once during the preceding eight years, and wool, butter, and hides not at all. The increase in wool is very marked, and bears out what has been said previously.

AGRICULTURE.

TAKEN as a whole, Australasia may be said to be in the first phase of agricultural settlement; indeed, several colonies have not yet emerged from the pastoral stage. Nevertheless the value of agricultural produce, estimated at farm prices, is considerable, and amounts to nearly 50 per cent. of the value of the pastoral and dairy produce. The return from agriculture in each colony for the season 1899–1900 was approximately as shown below :—

State.	Total value of Crops.	Average Value of Produce per acre.	Proportion of Total Value.
	£	£ s. d.	per cent.
New South Wales	5,582,000	2 5 9	22·11
Victoria	6,435,000	2 0 9	25·49
Queensland	1,848,000	4 7 11	7·32
South Australia	2,568,000	1 2 10	10·17
Western Australia	500,000	2 13 8	1·98
Tasmania	996,000	4 8 6	3·95
Commonwealth	17,929,000	2 1 5	71·02
New Zealand	7,318,000	4 4 6	28·98
Australasia	25,247,000	2 8 7	100·00

From this estimate it would seem that the value of crops per acre cultivated is much larger in Queensland and Tasmania than in the other colonies, a fact which is due to the proportionately large area under sugar-cane in the former colony, while in Tasmania the area devoted to fruit and hops, and the higher returns of cereals, account for the high average per acre which that province shows; in Western Australia, where the greater part of the produce consumed is imported, prices are higher than in the eastern colonies, and the small area devoted to the plough returns on an average a better price per acre than in the colonies where agriculture has received greater attention. In point of gross value New Zealand

occupies the first position among the members of the group, the produce of that province having a value considerably in excess of one-fourth of that of all Australasia. Victoria also produces over one-fourth of the total, and New South Wales nearly one-fourth. The value of the principal crops, and the percentage of each to the total production, are given in the following statement :—

Name of Crop.	Value.	Proportion to Total.
	£	per cent.
Wheat	6,382,000	25·3
Maize	1,283,000	4·7
Barley	618,000	2·5
Oats	2,165,000	8·6
Hay	6,010,000	23·8
Grass seed	335,000	1·4
Potatoes	1,378,000	5·5
Grapes	935,000	3·7
Hops	67,000	0·3
Tobacco	18,000	0·1
Sugar-cane	619,000	2·5
Orchards and Gardens	2,024,000	8·0
Green forage	518,000	2·1
Minor crops (other grain, root, &c.)	2,895,000	11·5
Total	25,247,000	100·0

The principal crop is wheat which returned 25·3 per cent. of the total value, hay coming next with 23·8 per cent. Minor crops returned the large sum of £2,895,000—11·5 per cent.—to which, New Zealand alone contributed £2,277,000, the high value of the production in that colony being due to the fact that there is an area of considerably over half a million acres devoted to the cultivation of turnips and other root crops, which are grown mostly as food for sheep.

The average value of agricultural produce per head of population in each of the Australasian colonies during the season 1899–1900 is represented by the figures given below. It will be seen that in the colonies of New Zealand, Tasmania, South Australia, and Victoria the development of agricultural resources has attracted the attention of the colonists to a greater extent than in the other provinces. New South Wales, however, has made a considerable advance in agricultural pursuits during the past few years, and from a position of dependence upon outside

sources for a large portion of its wheat supply, has become almost able to produce enough to meet its own requirements.

State.	Average value per head. £ s. d.
New South Wales	4 3 0
Victoria	5 10 9
Queensland	3 17 6
South Australia	6 19 7
Western Australia	2 19 0
Tasmania	5 10 10
Commonwealth	4 16 11
New Zealand	9 15 2
Australasia	5 13 5

Below will be found the value of the agricultural production of the colonies in the years 1871, 1881, and 1891. Comparing these figures with those for 1899 given above, it will be seen that while the total production of Australasia is now nearly £5,000,000 more than in 1881, the average value per head has declined nearly 25 per cent., and that, as compared with 1891, the value per head is lower. As subsequent tables will show, the great lowering of prices, and not want of productiveness, is responsible for this decline in values. The fall in prices, especially the prices of wheat, was very rapid down to 1895; for the next three years there was a very material increase, but in 1899 they fell again to the 1895 level :—

State.	1871.	1881.	1891.
	£	£	£
New South Wales	2,220,000	3,830,000	3,584,500
Victoria	3,300,000	5,894,000	7,009,100
Queensland	650,000	1,283,000	1,414,000
South Australia	1,789,000	3,283,000	3,045,000
Western Australia	258,000	248,000	380,900
Tasmania	724,000	981,000	1,046,500
Commonwealth	8,941,000	15,519,000	16,480,000
New Zealand	1,955,000	4,650,000	5,518,000
Australasia — Total	10,896,000	20,169,000	21,998,000
	£ s. d.	£ s. d.	£ s. d.
Australasia — Per head	5 12 8	7 5 3	5 14 6

Compared with the principal countries of the world, Australasia does not take a high position in regard to the gross value of the produce of its tillage, but in value per inhabitant it compares fairly well; indeed,

some of the colonies, such as New Zealand, Tasmania, and South Australia, show averages which surpass those of many of the leading agricultural countries. This may be partly seen from the following table, which gives approximately for 1891–95 the value of agricultural production in the principal countries of the world, with the average amount per head of population :—

Countries.	Value in millions.	Per head.	Countries.	Value in millions.	Per head.
	£	£		£	£
United Kingdom	126	3·2	Holland	18	4·0
France	284	7·3	Belgium	29	4·6
Germany	262	5·1	Switzerland	9	3·0
Russia.....	370	3·5	United States	487	7·7
Austria	210	5·7	Canada	33	6·9
Italy	141	4·6	Cape Colony	2	1·3
Spain	94	5·5	Argentina	24	6·0
Portugal.....	18	4·0	Uruguay	2	2·7
Sweden	20	4·9			
Norway	3	1·7			
Denmark	19	8·6	Australasia (1899) ...	25	5·7

Area under Cultivation.

The following figures, giving the total extent of land in cultivation in each of the colonies at different periods since the year 1861, will serve to illustrate the progress which agriculture has made. In this table, and in the others which follow, the years 1861, 1871, 1881, 1891, and 1899 embrace the period from the 1st April in each of those years to the 31st March in the following year :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	265,389	390,099	578,243	846,383	2,440,968
Victoria	410,406	851,354	1,435,446	2,116,654	3,155,051
Queensland	4,440	59,969	117,664	242,629	420,746
South Australia.....	400,717	837,730	2,156,407	1,927,689	2,238,240
Western Australia	24,705	51,724	53,353	64,209	186,396
Tasmania	163,385	155,046	148,494	168,121	225,126
Commonwealth.....	1,269,042	2,345,922	4,489,607	5,365,685	8,666,527
New Zealand	68,506	337,282	1,070,906	1,424,777	1,732,752
Australasia.....	1,337,548	2,683,204	5,560,513	6,790,462	10,399,279

The following table shows the increase in area, and the proportional yearly increase in cultivation, in each colony during the period of thirty nine years under review :—

State.	Increase in area from 1861 to 1899.	Rate of Increase in acreage per annum.
	acres.	per cent.
New South Wales	2,175,579	5·9
Victoria	2,744,645	5·4
Queensland	416,306	12·4
South Australia	1,837,523	4·5
Western Australia	161,691	5·3
Tasmania	61,741	0·8
Commonwealth	7,397,485	5·0
New Zealand	1,664,246	8·6
Australasia	9,061,731	5·4

Thus, although the provinces of Victoria, South Australia, New Zealand, and New South Wales have during this period provided the largest increase in the area of land cultivated, Queensland shows a much greater proportional increase, while agriculture in Tasmania has relatively to population remained almost stationary. Taking Australasia as a whole, it will be seen that the area under crop is now almost eight times as large as it was in 1861. If, however, the land artificially grassed be included, the total will come to 21,953,051 acres, or more than fourteen times the area in cultivation in 1861. A comparison of the acreage under crop on the basis of population, which is afforded by the table given below, may perhaps best serve to give an idea of the progress of agriculture ; and it will be seen that, on this basis, the greatest advance since 1891 has been made by New South Wales :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	0·7	0·8	0·8	0·7	1·8
Victoria	0·8	1·1	1·7	1·8	2·7
Queensland	0·1	0·5	0·5	0·6	0·9
South Australia	3·2	4·5	7·5	5·9	6·0
Western Australia	1·6	2·0	1·8	1·2	1·1
Tasmania	1·8	1·5	1·2	1·1	1·2
Commonwealth	1·1	1·4	2·0	1·6	2·3
New Zealand	0·7	1·3	2·1	2·2	2·3
Australasia	1·1	1·4	2·0	1·7	2·3

For the whole of Australasia the increase of agriculture as compared with population is shown in the following table :—

Increase of—	1861-71.	1871-81.	1881-91.	1891-99.
	per cent.	per cent.	per cent.	per cent.
Acreage under crop.....	100·6	107·2	22·1	53·1
Population	55·6	43·2	38·1	18·4

Although during the period of thirty-nine years the population of Australasia was nearly quadrupled, the area of land devoted to agriculture increased almost eightfold, and the rate of agricultural progress was more than twice that of the population. This improvement took place entirely during the twenty years from 1861 to 1881, and chiefly during the latter portion of that time; from 1881 to 1891 there was a big decline, the population increasing nearly twice as rapidly as the agricultural industry. During the last nine years, however, agriculture has regained the ground it lost during the preceding period.

The progress in the seventies is what naturally might be expected, as the gold fever had altogether subsided about the end of the first period, and a large portion of the population was seeking employment of a more settled nature than was afforded by the gold-fields. The comparative decrease noticeable in the eighties was attributable to various causes, such as the general tendency, elsewhere alluded to, of the population to congregate in the several metropolitan centres; the difficulty of taking up good land within easy access to markets; and also to the fact that there were large accessions to the numbers of those engaged in other callings without a corresponding increase in the agricultural classes. But the earnest attempts of the State to assist the agriculturist in obtaining land on easy terms, and to benefit him in other ways, coupled with the satisfactory advance in the price of wheat during the three years 1896–98, enabled the industry to overtake the population.

It was ascertained at the census of 1891 that the number of persons engaged in agricultural pursuits in the Australasian colonies was 310,642, of whom 286,272 were males, and 24,370 females. There is every reason to suppose that the present number is not less than 475,000.

In the following table will be found the proportion of land under crop to the total area of each colony, and the same with regard to Australasia as a whole. In instituting comparisons between the several colonies, however, it must be borne in mind that other circumstances than the mere area in cultivation require to be taken into consideration. It would not be fair, for instance, to compare Tasmania, which has

6·95 persons per square mile, with Western Australia, which has only 0·18 inhabitant to the square mile. The table has a value chiefly because it shows how each province has progressed in cultivation of the soil during the periods quoted :—

State.	1861.	1871.	1881.	1891	1899.
	per cent.	per cent.	per cent.	per cent.	per cent.
New South Wales	0·15	0·20	0·29	0·44	1·23
Victoria	0·73	1·51	2·55	3·76	5·61
Queensland	0·001	0·01	0·03	0·06	0·98
South Australia.....	0·07	0·15	0·37	0·33	0·39
Western Australia	0·006	0·008	0·009	0·01	0·03
Tasmania	0·97	0·92	0·88	0·99	1·34
Commonwealth.....	0·07	0·12	0·24	0·28	0·46
New Zealand.....	0·10	0·50	1·60	2·13	2·59
Australasia.....	0·07	0·14	0·28	0·34	0·53

The subjoined table shows the proportion of cultivated area devoted to the principal crops in each province. It will be seen that wheat forms the greatest percentage of the total tillage in Australasia as a whole, and in New South Wales, Victoria, South Australia, and Western Australia. Maize and sugar-cane are the principal crops in Queensland, and oats in New Zealand. In Tasmania only 28·6 per cent. of the cultivated area is under wheat, which, however, is still the principal crop of the colony :—

Crop.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Wheat	58·4	68·6	12·5	81·3	45·4	28·6	15·6	56·6
Maize	8·8	0·3	26·2	....	0·1	0·1	1·0	3·4
Barley	0·3	2·5	1·8	0·7	2·1	3·4	2·8	1·6
Oats.....	1·2	8·6	0·2	0·9	2·1	20·0	23·0	7·4
Potatoes	1·4	1·8	2·5	0·4	1·5	12·0	2·1	1·7
Hay	22·7	14·3	14·0	13·9	42·3	18·8	14·0	15·0
Vines	0·4	0·9	0·5	0·9	1·7	....	....	0·6
Sugar-cane	0·9	....	26·3	....	....	....	....	1·3
Other crops	5·9	3·0	16·0	1·9	4·8	17·1	41·5	12·4
Total	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

The position in which each of the principal agricultural products stood in relation to the total area under crop in Australasia, at various periods since the year 1861, may be ascertained from the following table. The figures should, however, be taken in conjunction with those giving the actual areas cultivated, for a decline in the proportion of land under any particular crop does not necessarily mean a falling-off in the area devoted to that product; on the contrary, in few instances has there been any actual retrogression. It is satisfactory to observe that there is a greater proportionate increase in the cultivation of the more valuable crops, and that, despite checks from causes due to unfavourable seasons, the area devoted to vines, sugar-cane, and "other crops" formed 14·3 per cent. of the whole in 1899, as compared with 8·6 per cent. in 1861 :—

Product.	1861.	1871.	1881.	1891.	1899.
	per cent.	per cent.	per cent.	per cent.	per cent.
Wheat	53·6	51·4	60·7	55·0	56·6
Oats	10·6	13·5	7·9	8·4	7·4
Maize	4·6	5·3	3·0	4·3	3·4
Barley	2·2	2·3	1·9	1·4	1·6
Potatoes	4·2	3·0	1·8	2·0	1·7
Hay	16·2	11·9	15·1	16·0	15·0
Vines.....	0·5	0·7	0·3	0·7	0·6
Sugar-cane	.....	0·5	0·7	1·1	1·3
Other crops	8·1	11·4	8·6	11·1	12·4
Total.....	100·0	100·0	100·0	100·0	100·0

Wheat.

Only three of the seven colonies—Victoria, South Australia, and New Zealand—produce sufficient wheat for their own requirements; although during the last two years Tasmania has had a surplus, and in 1898 New South Wales produced enough for home consumption. But after the deficiencies of the rest of Australasia are supplied by the three above-named colonies, there is in most seasons a large balance for export, which finds a ready market in Great Britain, where Australian wheat is well and favourably known. For the season 1899–1900, although

a larger area was sown than at any previous period, protracted drought, coupled with unseasonable rainfall, had the effect of greatly curtailing the production. Taking Australasia as a whole, there was a net export of breadstuffs, during 1899, equivalent to 14,557,709 bushels of grain, valued at £1,843,300.

The subjoined table shows the progress of wheat-growing during the period of the last thirty-nine years:—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	123,468	154,030	221,888	356,666	1,426,166
Victoria	196,922	334,609	926,729	1,332,683	2,165,693
Queensland	392	3,024	10,958	19,306	52,527
South Australia	310,636	692,508	1,768,781	1,552,423	1,821,137
Western Australia	13,584	25,697	21,951	26,866	84,516
Tasmania	58,823	63,332	51,757	47,584	64,328
Commonwealth.....	703,825	1,273,200	3,002,064	3,335,528	5,614,367
New Zealand	29,531	108,720	365,715	402,273	269,749
Australasia	733,356	1,381,920	3,367,779	3,737,801	5,884,116

It will be seen that, during the twenty years extending from 1861 to 1881, all the colonies, with the exception of Tasmania, made considerable additions to the area under wheat, the increase for the whole of Australasia being 2,634,423 acres, or an advance of 359 per cent. From 1881 to 1899 the extension of this form of cultivation has not been so general, most of the increase in area having taken place during the last few seasons, in consequence of the rise in the prices of wheat which was taken advantage of by the agriculturists of all the colonies. New Zealand is the only province which shows a decrease. In Australasia, as a whole, the increase in area since 1881 amounts to 2,516,337 acres—and of this total 2,443,242 acres have been added in New South Wales and Victoria. In New South Wales, especially, rapid advance has been made, while in South Australia and New Zealand part of the areas which were abandoned as wheat lands has again been placed under this cereal. At present more than one-half of the land in cultivation is devoted to wheat-growing, and in an ordinary season the produce of 750,000 acres is available for export to Europe.

The production of wheat during the period covered by the preceding table was as follows :—

State.	1861.	1871.	1881.	1891.	1899.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	1,606,034	2,229,642	3,405,966	3,963,668	13,604,166
Victoria	3,607,727	4,500,795	8,714,377	13,629,370	15,237,948
Queensland	5,880	36,288	39,612	392,309	614,414
South Australia	3,410,756	3,967,079	8,087,032	6,436,488	8,453,135
Western Australia	160,155	345,368	153,657	288,810	987,329
Tasmania	1,380,913	847,962	977,365	930,841	1,101,303
Commonwealth	10,171,465	11,927,134	21,378,009	25,641,486	39,998,295
New Zealand	772,531	2,448,203	8,297,890	10,257,738	8,581,898
Australasia	10,943,996	14,375,337	29,675,899	35,899,224	48,580,193

The greatest increase in production is shown by New South Wales, which in 1899 produced nearly ten million bushels more than in 1891, and from the following statement which gives the proportion of the total crop produced by each colony in 1881, 1891, and 1899, the progress made by New South Wales will be evident, for whereas in 1881 and 1891 it only produced 11 per cent. of the total crop, in 1899 it produced 28 per cent. Victoria and New Zealand show the largest declines, the proportions falling from 38 per cent. and 28·6 per cent. in 1891 to 31·4 per cent. and 17·7 per cent. respectively in 1899 :—

State.	1881.	1891.	1899.
	per cent.	per cent.	per cent.
New South Wales	11·5	11·0	28·0
Victoria	29·4	38·0	31·4
Queensland	0·1	1·1	1·2
South Australia	27·2	17·9	17·4
Western Australia	0·5	0·8	2·0
Tasmania	3·3	2·6	2·3
New Zealand	28·0	28·6	17·7
Australasia	100·0	100·0	100·0

As a producer of wheat, Australasia is of little account when viewed in comparison with the great wheat-producing countries of the world. According to the estimate published by the United States Department of Agriculture, the production of wheat in Europe, America, Asia, and Africa in 1899 was 2,586,884,000 bushels, which, with the 48,580,000 bushels yielded by Australasia, gives the world's production as 2,635,564,000 bushels; and the seven colonies, therefore, only produced 1·8 per cent. of the total crop. The figures for each country are appended, the production being represented in Imperial bushels :—

Country.	Bushels.	Country.	Bushels.
Europe—		Africa—	
Russia	381,693,000	Algeria	14,538,000
France	354,804,000	Egypt	13,569,000
Hungary	144,954,000	Tunis	4,652,000
Germany	137,015,000	Cape Colony	1,938,000
Italy	133,664,000		
Spain	85,290,000	Total	34,697,000
United Kingdom	67,190,000		
Austria	40,980,000		
Roumania	25,261,000	America—	
Bulgaria	23,261,000	United States	530,447,000
Turkey	14,538,000	Argentine Republic	89,328,000
Belgium	12,018,000	Canada	58,113,000
Servia	8,432,000	Mexico	14,538,000
Portugal	6,203,000	Chili	12,600,000
Sweden and Norway	4,545,000	Uruguay	6,944,000
Holland	4,168,000		
Switzerland	4,070,000	Total	711,970,000
Denmark	3,392,000		
Greece	1,938,000		
		Australasia—	
Total	1,453,416,000	Victoria	15,238,000
		New South Wales	13,604,000
Asia—		New Zealand	8,582,000
India	225,422,000	South Australia	8,453,000
Russia in Asia	90,534,000	Tasmania	1,101,000
Turkey	34,116,000	Western Australia	987,000
Japan	19,384,000	Queensland	615,000
Persia	15,507,000		
Cyprus	1,938,000	Total	48,580,000
Total	386,901,000	Grand Total	2,635,564,000

The yield of wheat per acre during the season 1899–1900 ranged from 4·64 bushels in South Australia to 31·81 bushels in New Zealand, but taken on the whole was not very satisfactory, on account of the drought which generally prevailed throughout the continent. With the exception of Western Australia and New Zealand, the yield was below the average for the last ten years. The yields in New Zealand during the last two seasons were much higher than in any of the

preceding eight years. On the other hand, the decennial averages for most of the other colonies have been reduced through the drought which has continued for the last five years. The average yield per acre for each colony for 1899 and during the ten years 1890–99 are shown below :—

State.	Average Yield per acre.	
	1899.	1890–99.
	bushels.	bushels.
New South Wales	9·54	9·95
Victoria	7·04	8·07
Queensland	11·70	15·53
South Australia	4·64	4·69
Western Australia	11·68	10·95
Tasmania	17·12	19·05
Commonwealth	7·12	7·33
New Zealand	31·81	24·61
Australasia	8·26	8·49

A yield of 8·5 bushels per acre is a very small one when compared with the following results obtained in some of the principal wheat-growing countries of the world. The averages shown are mostly based on the yields during the five years 1894–98 :—

Country.	Average Yield per acre.	Country.	Average Yield per acre.
	bushels.		bushels.
United Kingdom	30·9	United States	13·2
Germany	25·7	India	12·1
France	18·6	Russia	9·3
Hungary	16·8	Argentine Republic	9·3

A bare statement of averages, however, is somewhat misleading. In South Australia, for example, it is found that owing to favourable conditions of culture a yield of 7 bushels is financially as satisfactory a crop as one of 15 bushels in New South Wales or of 20 bushels in New Zealand. In the Australasian colonies the yield could be greatly increased if cultivation of a more scientific character were adopted. As a rule, the seed is simply put into the ground, and little is done to assist the natural growth of the crops.

The total value of the wheat crop for 1899–1900 and the value of the return per acre in each colony are shown below :—

State.	Value of Production.	Value per Acre.
	£	£ s. d.
New South Wales	1,784,400	1 5 0
Victoria	2,031,800	0 18 9
Queensland	87,300	1 13 3
South Australia	1,124,300	0 12 4
Western Australia	148,100	1 15 1
Tasmania	133,300	2 1 5
Commonwealth	5,309,200	0 18 11
New Zealand	1,072,800	3 19 6
Australasia	6,382,000	1 1 8

The very high value returned in New Zealand is due to the rather small area under cultivation, and to the phenomenal yield of grain ; the values in Tasmania, Western Australia, and Queensland also appear high for similar reasons.

A detailed table of the value of the yield per acre during each of the last ten years is shown below for the three principal wheat-growing colonies—New South Wales, Victoria, and South Australia. The values are estimated on the basis of the market rates ruling in February and March of each year. It will be seen that a considerable decline took place between 1891 and 1895, due for the most part to the fall in prices rather than to any decrease of production. The effect of the rise in prices is seen in the more satisfactory results in New South Wales during the seasons ending March, 1896, 1897, and 1898 ; for Victoria and South Australia the drought is largely responsible for the low values in those years :—

Year ending March.	Average Yield per acre.			Value of Average Yield per acre.		
	New South Wales.	Victoria.	South Australia.	New South Wales.	Victoria.	South Australia.
	bushels.	bushels.	bushels.	£ s. d.	£ s. d.	£ s. d.
1891	10·9	11·1	5·6	2 0 10	1 19 9	0 19 7
1892	11·1	10·3	4·3	2 2 6	2 2 3	0 17 11
1893	15·1	11·0	6·1	2 5 2	1 14 0	0 19 3
1894	11·0	10·4	7·9	1 10 1	1 0 1	0 18 4
1895	10·9	8·3	4·9	1 4 6	0 13 6	0 8 0
1896	8·7	4·0	4·2	1 17 0	0 17 9	0 19 10
1897	10·2	4·5	1·7	2 3 5	1 3 8	0 8 7
1898	10·6	6·4	2·6	2 4 2	1 6 2	0 11 3
1899	7·0	9·1	4·9	0 19 0	0 19 9	0 13 7
1900	9·5	7·0	4·6	1 5 0	0 18 9	0 12 4

The rates just given, as well as elsewhere in this chapter, represent farm prices, and not values at the place of consumption.

The average consumption of wheat per head of population in each of the seven colonies for the last decade was as stated below. The large proportion of adult male population in Western Australia accounts for the high figures for that province :—

	Bushels.
New South Wales	5·9
Victoria	5·7
Queensland	5·6
South Australia	6·3
Western Australia	9·3
Tasmania	7·5
New Zealand	7·5

For the whole of Australasia, the average consumption was 6·3 bushels per head, which is larger than the quantity consumed in any other part of the world for which records are available, with the exception of France and Canada.

The following table shows the net imports or exports of wheat and flour of each of the colonies during the year 1899, 1 ton of flour being taken as equal to 50 bushels of grain. The exporting colonies are Victoria, South Australia, New Zealand, and Tasmania. Since 1896, New South Wales has almost been able to supply the wheat required for the food of its inhabitants, and in 1898 was actually independent of outside supplies, but in 1899 a small import was again necessary. During the last two years Tasmania has not only produced enough wheat for home consumption, but has had a small surplus, available for export :—

State.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	2,126,453	.....
Victoria	.....	10,635,840
Queensland	2,326,584	.....
South Australia	.....	5,609,041
Western Australia	623,688	.....
Tasmania	.....	413,042
Commonwealth	.....	11,581,198
New Zealand	.....	2,976,511
Australasia	.....	14,557,709

The records for the six states which form the Commonwealth show that since 1879 there were only four years during which they were forced to import wheat from places outside their boundaries. These years were 1886, 1889, 1896, and 1897. In the first-named year the wheat crop was a partial failure in Victoria and South Australia, and almost a complete failure in New South Wales and Queensland. In 1889 there was a general failure in New South Wales and Victoria. In 1896 the crop failed in Victoria, and in the following year, that Colony for the first time in twenty-two years was compelled to import wheat, the net import, however, being only 61,160 bushels. The following statement gives the figures for the Commonwealth for the twenty years since 1880 :—

Year.	Wheat Crop.	Net Export of Breadstuffs.	Year.	Wheat Crop.	Net Export of Breadstuffs.
	bushels.	bushels.		bushels.	bushels.
1880	28,730,159	11,594,381	1890	34,039,289	8,836,170
1881	23,438,161	7,988,161	1891	27,118,259	10,646,298
1882	21,378,009	5,751,130	1892	25,675,265	4,126,538
1883	21,492,505	4,742,290	1893	32,759,693	8,829,941
1884	35,714,456	17,130,843	1894	36,929,947	11,916,782
1885	30,559,060	11,583,644	1895	30,855,812	6,774,377
1886	20,165,988	(—) 603,532	1896	19,557,726	(—) 4,347,168
1887	28,899,220	4,265,924	1897	20,880,479	(—) 3,641,306
1888	35,930,697	10,643,673	1898	28,241,409	1,341,596
1889	19,757,509	(—) 2,107,136	1899	41,417,853	11,581,198

(—) denotes excess of imports.

In ordinary seasons Australasia ranks about sixth amongst the exporting countries; still, its contribution to the world's markets does not form more than one-thirtieth of the demand, and it cannot, therefore, be said to form a factor of any consequence in the trade.

The United Kingdom is the largest importer of wheat, and the British demand largely influences the price throughout the world. The average London prices per quarter of 8 bushels during the last decennial period were as follow :—

Year.	Price per quarter.	Year.	Price per quarter
	s. d.		s. d.
1890	31 11	1895	23 1
1891	37 0	1896	26 2
1892	30 3	1897	30 2
1893	26 4	1898	34 0
1894	22 10	1899	25 8

Oats.

The cultivation of oats, which come next to wheat in importance as a grain crop, is increasing in Australasia, as the following figures show:—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	7,224	13,795	16,348	12,958	29,125
Victoria	91,061	175,944	146,995	190,157	271,280
Queensland	69	131	88	715	714
South Australia	1,638	3,586	3,023	12,637	20,229
Western Australia	507	1,474	827	1,301	3,940
Tasmania	29,022	29,631	27,535	28,360	45,110
Commonwealth	129,521	224,561	194,816	246,128	370,398
New Zealand	15,872	139,185	243,387	323,508	398,243
Australasia	145,393	363,746	438,203	569,636	768,641

The colony of New Zealand furnishes considerably more than one-half of the production of oats. In New South Wales the cultivation of the cereal has been comparatively neglected; in Victoria and Tasmania however, it is next to wheat in importance; whilst in Queensland, South Australia, and Western Australia the climate is ill-adapted to the cultivation of oats, and the yield is small and counts for very little in the total production of the grain. The total yield in each colony for the period covered by the preceding table was as follows:—

State.	1861.	1871.	1881.	1891.	1899.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	152,426	280,887	356,566	276,259	627,904
Victoria	2,136,430	3,299,889	3,612,111	4,412,730	6,116,046
Queensland	.....	.....	1,121	16,669	10,712
South Australia	33,160	38,894	32,219	80,876	218,331
Western Australia	8,162	28,330	8,270	18,539	73,556
Tasmania	751,475	593,477	783,129	873,173	1,148,160
Commonwealth	3,081,653	4,241,477	4,793,416	5,678,246	8,194,709
New Zealand	512,665	3,726,810	6,924,848	11,009,020	16,325,832
Australasia	3,594,318	7,968,287	11,718,264	16,687,266	24,520,541

The average yield per acre in each colony in 1899, and during the ten years 1890–99 are shown below :—

State.	Average yield per acre.	
	1899.	1890–99.
	bushels.	bushels.
New South Wales	21·6	19·4
Victoria	22·5	9·6
Queensland	15·0	18·1
South Australia	10·8	8·1
Western Australia	18·7	16·6
Tasmania	25·5	28·3
Commonwealth	22·1	20·0
New Zealand	41·0	32·8
Australasia	31·9	26·6

Of the colonies which grow oats to any extent Tasmania was the only one whose yield last year was below the decennial average. New Zealand had the very high average of 41 bushels per acre, which compares more than favourably with the averages which prevailed during 1894–98 in the following principal oat-growing countries of the world :—

Country.	Average yield per acre.	Country.	Average yield per acre.
	bushels.		bushels.
United Kingdom	40·0	United States	26·3
Germany	35·0	France	26·0
Canada	31·1	Austria	19·8
Hungary	27·0	Russia, in Europe.	14·9

The total value of the oats crop and the return per acre, in each of the Australasian colonies, for the season 1899–1900, will be found below :—

State.	Value.	Value per acre.
	£	£ s. d.
New South Wales	75,800	2 12 1
Victoria	526,000	1 18 9
Queensland	1,300	1 16 5
South Australia	22,700	1 2 5
Western Australia	7,300	1 17 1
Tasmania	95,300	2 2 3
Commonwealth	728,400	1 19 4
New Zealand	1,436,600	3 12 2
Australasia	2,165,000	2 16 4

The net import or export of oats by each of the colonies is given in the following table. New Zealand was the only province which exported this cereal to any considerable extent in 1899, although Tasmania and Victoria also exported fairly large quantities. Owing to the war in South Africa, a large demand for oats as horse-feed was created in that country, and altogether 753,470 bushels, valued at £66,000, were exported from New Zealand, Tasmania, and Victoria. New Zealand also exported 693,281 bushels to the United Kingdom :—

State.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	1,690,912	.....
Victoria	.....	377,925
Queensland	186,333	.....
South Australia	306,200	.....
Western Australia	755,499	.....
Tasmania	.....	910,106
Commonwealth	1,650,913	.....
New Zealand	.....	3,515,909
Australasia	.....	1,864,996

According to a carefully-compiled estimate of the average production of oats throughout the world, issued by the Agricultural Department of the United States, the commercial supply of this grain in 1899 is represented by the following condensed results :—

	Bushels.
Europe	2,102,942,000
North America	897,412,000
Asia	83,988,000
Africa	4,453,000
Australasia	24,521,000
Total	3,113,316,000

Maize.

Maize is, next to sugar-cane, the principal crop grown in Queensland, and is one of the most important products of New South Wales. In the other colonies the climate is not suited to its growth, and the cultivation of the cereal extends to not quite 29,000 acres. The following

figures show that fair progress has been made since 1861 in the area devoted to this crop :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	57,959	119,956	117,478	174,577	214,697
Victoria	1,714	1,709	1,783	8,230	11,037
Queensland	1,914	20,329	46,480	101,598	110,489
Other colonies.....	91	113	36	23	266
Commonwealth	61,678	142,107	165,777	284,428	336,489
New Zealand	770	.....	3,177	5,447	17,429
Australasia ...	62,448	142,107	168,954	289,875	353,918

The production in the same years was as follows :—

State.	1861.	1871.	1881.	1891.	1899.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	1,727,434	4,015,973	4,330,956	5,721,706	5,976,022
Victoria	20,788	30,833	81,007	461,447	624,844
Queensland	42,100	508,000	1,313,655	3,077,915	1,965,598
Other colonies ...	367	2,000	648	483	2,263
Commonwealth	1,790,689	4,556,806	5,726,266	9,261,551	8,568,727
New Zealand	31,570	.....	127,257	238,746	669,896
Australasia ...	1,822,259	4,556,806	5,853,523	9,500,297	9,238,623

The following table shows the average yield of each colony and of Australasia for 1899, and for the ten years ended 1899 :—

State.	Average yield per acre.	
	1899.	1890-99.
	bushels.	bushels.
New South Wales	27·8	29·9
Victoria	56·6	52·1
Queensland	17·8	24·1
Western Australia	17·0	18·2
Commonwealth	25·5	28·6
New Zealand	38·4	42·0
Australasia	26·1	28·9

The averages for Victoria and New Zealand are of little value, as the area under maize in those colonies is small and very favourably situated; while Western Australia, during the whole ten years, had but 741 acres under cultivation, producing 13,476 bushels.

The total value of the crop for the season 1899–1900, and the average return per acre, will be found below :—

State.	Total value of crop.	Average value per acre.
	£	£ s. d.
New South Wales	784,500	3 13 1
Victoria	87,200	7 18 0
Queensland	318,400	2 17 6
Other colonies	400	1 10 1
Commonwealth	1,190,500	3 10 9
New Zealand	92,500	5 6 2
Australasia	1,283,000	3 12 6

The high average value per acre of maize produced in Victoria and New Zealand is due to the fact that the area under this crop is small, and the local average prices are relatively higher than in New South Wales and Queensland, where large areas are devoted to the cultivation of this cereal.

The net import or export of maize by each colony during 1899 was as follows :—

State.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	357,401	.....
Victoria	.....	124,166
Queensland	501,095	.....
South Australia	4,706	.....
Western Australia	10,722	.....
Tasmania	194	.....
Commonwealth	749,952	.....
New Zealand	.....	187,932
Australasia	562,020	.....

It is rather curious that the principal maize-growing colonies, New South Wales and Queensland, were the only ones to import maize to any extent. In this part of the world corn does not enter into consumption as an article of food, as it does in other countries, and particularly in America, which produces and consumes more than 80 per cent. of the whole maize crop of the world, as the following figures for 1899—compiled on the authority of the Department of Agriculture in the United States—will show :—

	bushels.
North America	1,985,276,000
South America	67,778,000
Europe	457,111,000
Africa	33,335,000
Australasia	9,239,000
Total	2,552,739,000

Barley.

Of the cereal productions of Australasia, barley is grown on the smallest acreage. The area under this crop at different periods was as follows :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	2,924	3,461	6,427	4,459	7,154
Victoria	3,419	16,772	48,652	45,021	79,573
Queensland	13	971	256	739	7,474
South Australia	10,637	17,225	11,953	11,461	15,767
Western Australia	2,412	5,083	3,679	3,738	3,885
Tasmania	7,279	4,275	4,597	2,650	7,606
Commonwealth	26,684	47,787	75,564	68,068	121,459
New Zealand	3,457	13,305	29,808	24,268	48,003
Australasia	30,141	61,092	105,372	92,336	169,462

For the same years the production was as stated below :—

State.	1861.	1871.	1881.	1891.	1899.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	41,054	55,284	135,218	93,446	132,476
Victoria	68,118	335,506	927,566	830,741	1,466,088
Queensland	158	11,836	3,207	21,302	118,443
South Australia	168,137	164,161	137,165	107,183	188,917
Western Australia	2,412	5,083	36,790	48,594	56,587
Tasmania	169,381	76,812	102,475	71,686	142,721
Commonwealth	449,260	648,682	1,342,421	1,172,952	2,105,232
New Zealand	96,658	287,646	664,093	688,683	1,585,145
Australasia	545,918	936,328	2,006,514	1,861,635	3,690,377

The average yield of barley per acre in each colony for 1899, and for the ten years ended 1899, is given in the following table :—

State.	Average Yield per Acre.	
	1899.	1890-99.
	bushels.	bushels.
New South Wales	18·5	17·3
Victoria	18·4	17·2
Queensland	15·8	17·7
South Australia	12·0	11·6
Western Australia	14·6	12·8
Tasmania	18·8	22·8
Commonwealth	17·3	16·7
New Zealand	33·0	28·7
Australasia	21·8	20·0

As in the case of the other three cereals which have just been dealt with, New Zealand had a far larger yield of barley per acre than any other colony, and compares favourably with the following countries, which averaged during 1894–98—United Kingdom, 34·0 bushels per acre ; Germany, 30·0 ; United States, 22·5 ; and France, 21·0 bushels per acre. Barley is not cultivated in these colonies to the extent it deserves, and to the

total production of 816,391,000 bushels by the world in 1899 Australasia contributed only 3,690,000 bushels. In fruitful seasons Australasia produces sufficient barley, exclusive of that required for malt, for home requirements, and a small surplus for export; but if the combined trade in barley and malt be considered, all the colonies, with the exception of Victoria, Tasmania, and New Zealand, are dependent upon external sources. The high import duties in Victoria on both these articles practically prohibit importations. The trade in barley and malt of each colony in 1899 was as follows:—

State.	Barley.		Malt.	
	Net Imports.	Net Exports.	Net Imports.	Net Exports.
	bushels.	bushels.	bushels.	bushels.
New South Wales	115,966	.....	422,272	.....
Victoria	.....	5,480	.....	16,070
Queensland	57,933	.....	127,411	.....
South Australia	.....	3,700	18,424	.....
Western Australia	20,587	.....	140,989	.....
Tasmania	.....	1,864	500	.....
Commonwealth	183,442	.....	693,526	.....
New Zealand	.....	125,437	.....	172,511
Australasia	58,005	.....	521,015	.....

The total value of the barley crop and the average return of this cereal per acre during the season 1899–1900 will be found below:—

State.	Total value of barley crop.	Average value per acre.
	£	£ s. d.
New South Wales	16,000	2 4 9
Victoria	276,000	3 9 4
Queensland	20,300	2 14 4
South Australia	33,000	2 1 10
Western Australia	9,900	2 11 0
Tasmania	25,000	3 5 9
Commonwealth	380,200	3 2 7
New Zealand	237,800	4 19 1
Australasia	618,000	3 12 11

Potatoes.

The cultivation of the potato is not confined to any particular colony. Victoria and New South Wales have the largest areas under this crop, but both are exceeded by New Zealand in production. The following table shows the acreage under potatoes in each colony :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	10,040	14,770	15,943	22,560	34,968
Victoria	27,174	39,064	39,129	57,334	55,469
Queensland	512	3,121	5,086	9,173	10,766
South Australia	2,612	3,156	6,136	6,892	8,406
Western Australia	277	494	278	532	2,837
Tasmania	9,349	8,154	9,670	16,393	26,951
Commonwealth...	49,964	68,759	76,242	112,884	139,397
New Zealand.....	7,292	11,933	22,540	27,266	36,984
Australasia	57,256	80,692	98,782	140,150	176,381

The production for the same periods was as follows :—

State.	1861.	1871.	1881.	1891.	1899.
	tons.	tons.	tons.	tons.	tons.
New South Wales	30,942	44,758	44,323	62,283	81,337
Victoria	59,364	125,841	134,290	109,786	173,381
Queensland	1,080	6,585	11,984	25,018	22,675
South Australia	7,726	10,989	18,154	27,824	19,716
Western Australia	817	1,457	556	1,596	8,372
Tasmania	47,428	22,608	33,565	63,100	101,670
Commonwealth...	147,357	212,238	242,872	289,607	407,151
New Zealand.....	37,554	42,130	121,890	162,046	222,124
Australasia	184,911	254,368	364,762	451,653	629,275

The average production of potatoes per acre is next given, for 1899, and for the ten years ended 1899. New Zealand, it will be seen, shows a considerably larger return than any of the other provinces :—

State.	Average Yield per Acre.	
	1899.	1890-99.
	tons.	tons.
New South Wales	2·3	2·6
Victoria	3·1	3·3
Queensland	2·1	3·0
South Australia	2·3	2·8
Western Australia	3·0	3·3
Tasmania	3·8	3·7
Commonwealth	2·9	3·1
New Zealand	6·0	5·9
Australasia	3·6	3·7

Only three of the colonies are in a position to export potatoes in any quantity—Tasmania, Victoria, and New Zealand. The surplus in Victoria, though at one time considerable, has now very much decreased. The following were the imports or exports of potatoes by each colony in 1899 :—

State.	Net Imports.	Net Exports.
	tons.	tons.
New South Wales	58,384	.....
Victoria	.....	10,962
Queensland	15,054	.....
South Australia	2,665	.....
Western Australia	8,886	.....
Tasmania	.....	45,628
Commonwealth	28,399	.....
New Zealand	.....	25,393
Australasia	3,006	.....

The total value of the potato crop and the average return per acre for 1899–1900 will be found below :—

State.	Value of crop.	Average value per acre.
	£	£ s. d.
New South Wales	193,200	5 10 6
Victoria	379,400	6 16 10
Queensland	56,800	5 5 6
South Australia	43,500	5 3 6
Western Australia	25,100	8 16 11
Tasmania	213,500	7 18 5
Commonwealth	911,500	6 10 9
New Zealand	466,500	12 12 3
Australasia	1,378,000	7 16 3

Hay.

Considerable quantities of wheat, oats, barley, and lucerne are grown for the purpose of being converted into hay, but the area cut varies, of course, according to the season. The area cut for hay has largely increased since 1881, as will be seen from the table appended :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	45,175	51,805	146,610	163,863	554,048
Victoria	74,681	103,206	212,150	369,498	450,189
Queensland	280	3,828	16,926	30,655	58,939
South Australia	62,874	97,812	333,467	304,171	311,440
Western Australia	6,676	*14,342	24,445	28,534	78,880
Tasmania	31,803	31,578	34,790	45,445	42,492
Commonwealth	221,489	302,571	768,388	942,166	1,495,988
New Zealand	†27,160	30,717	68,423	46,652	243,344
Australasia	248,649	333,288	836,811	988,818	1,739,332

* In 1869. † In 1867.

In New Zealand, for all the years except the last, the areas shown only include the extent of sown grasses cut for hay. In 1899 this area was 68,234 acres. It is not possible to quote for the earlier years the area under wheat, oats, &c., cut for this purpose. Similarly, the production shown below for those years only includes the quantity of grass cut :—

State.	1861.	1871.	1881.	1891.	1899.
	tons.	tons.	tons.	tons.	tons.
New South Wales	57,363	77,460	198,532	209,417	546,850
Victoria	92,497	144,637	238,793	505,246	596,193
Queensland	459	6,278	19,640	58,842	103,409
South Australia	78,886	98,266	240,827	193,317	229,800
Western Australia	6,609	14,288	24,445	28,534	70,078
Tasmania	59,851	30,891	44,957	66,996	51,123
Commonwealth	295,665	371,820	767,194	1,062,352	1,597,453
New Zealand	36,666	35,674	89,081	67,361	450,800
Australasia	332,331	407,494	856,275	1,129,713	2,048,253

The average yield of hay per acre will be found in the next table, the periods covered being the year 1899 and the ten years which closed with 1899. The production of hay in New Zealand is not known accurately, but has been estimated at 1·9 tons per acre :—

State.	Average yield per acre.	
	1899.	1890-99.
	tons.	tons.
New South Wales	1·0	1·0
Victoria	1·3	1·2
Queensland	1·8	1·9
South Australia	0·7	0·7
Western Australia	0·9	0·9
Tasmania	1·2	1·3
Commonwealth	1·1	1·1
New Zealand	1·9	1·9
Australasia	1·2	1·2

The greater portion of the hay is produced from wheat, although in New South Wales, Victoria, Queensland, and New Zealand there are large areas under oaten and lucerne hay, which are in great demand and readily sell at remunerative prices; in fact, so profitable is the return from oaten hay, that in New South Wales and Queensland the cultivation of oats for threshing is practically neglected for the sake of hay. For the most part, hay is grown in each province in quantities sufficient for its own requirements, New South Wales, Queensland, and Western Australia ordinarily being the only colonies which import to any extent.

The net import or export of hay and chaff by each colony during the year 1899 was as follows:—

State.	Net Imports.	Net Exports.
	tons.	tons.
New South Wales	131,609	.....
Victoria	.....	105,177
Queensland	12,317	.....
South Australia	.....	10,631
Western Australia	871	.....
Tasmania	.....	11,206
Commonwealth	17,783	.....
New Zealand	.....	571
Australasia	17,212	.....

The value of the return from hay in 1899–1900 was only second to that from wheat; the value in each colony and the return per acre will be found below:—

State.	Total Value of Hay Crop.	Average Value per Acre.
	£	£ s. d.
New South Wales	1,757,400	3 3 5
Victoria	1,959,000	4 7 0
Queensland	326,500	5 10 10
South Australia	551,500	1 15 5
Western Australia	210,200	2 13 4
Tasmania	148,400	3 9 10
Commonwealth	4,953,000	3 6 3
New Zealand	1,057,000	4 6 11
Australasia	6,010,000	3 9 1

Green Forage and Sown Grasses.

The cultivation of maize, sorghum, barley, oats, and other cereals for the purpose of green food, and the laying-down of lands under lucerne and grass, engage attention in the districts where dairy-farming is carried on. The agricultural returns of some of the colonies do not admit of a distribution being made between these forms of cultivation prior to 1887. The following table shows the area under such green food in 1887, 1891, and 1899, and it will be seen that there have been large developments in most of the colonies, especially in New South Wales.

The return from the cultivation of green forage in all the colonies during the season 1899-1900 is estimated at £518,000, or nearly £3 an acre.

State.	Green Food.			Sown Grasses.		
	1887.	1891.	1899.	1887.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.	acres.
New South Wales..	20,403	32,138	75,518	192,678	333,238	378,852
Victoria...	6,036	9,202	18,574	154,612	174,982	154,232
Queensland	9,582	10,727	35,514	13,619	20,921	19,228
South Australia ...	10,079	6,416	12,460	23,217	17,519	21,593
Western Australia	... ..	238	1,000	.....	.....	2,590
Tasmania	1,246	1,101	3,091	184,653	208,596	290,618
Commonwealth	47,346	59,822	146,157	568,779	755,256	867,113
New Zealand	98,029	118,484	26,645	5,869,247	7,357,229	10,853,302
Australasia ...	145,375	178,306	172,802	6,438,026	8,112,485	11,720,415

Apparently there has been a decrease since 1891 in the acreage under green food in New Zealand, but it is believed that the greater portion of the area shown in the two earlier years was really sown for hay. In Victoria, Queensland, Tasmania, and New Zealand various areas of sown grasses are cut for seed, chiefly rye grass and cocksfoot, the total quantity of grass seed produced in 1899 being 13,391 tons, valued at £335,000. The production in Victoria was 250 tons; in Queensland, 3 tons; in Tasmania, 240 tons; and in New Zealand, 12,898 tons. The acreage on which this grass seed was produced is included in the total given above for sown grasses, and amounted to 2,283 acres in Victoria, 24 acres in Queensland, 1,841 acres in Tasmania, and 94,261 acres in New Zealand.

The Vine.

The history of the vine in Australia dates from the year 1828, when cuttings from the celebrated vineyards of France, Spain, and the Rhine Valley were planted in the Hunter River District of New South Wales, forming the nursery for the principal vineyards of that colony. Years afterwards the vine was planted in the Murray River District and other parts of New South Wales, and was afterwards introduced into Victoria and South Australia, and is now cultivated in all the provinces of the Australian continent. In South Australia a large number of Germans are employed in the industry of wine-making.

The climate and soil of Australia are peculiarly adapted to the successful cultivation of the vine, and with an increasing local demand, and the opening up of a market in England, where Australian wines have obtained due appreciation, the future expansion of wine-growing appears fairly assured. The depreciation which some of the foreign wines have suffered, both in quantity and quality, owing to the devastation of the vineyards by phylloxera, is an additional reason why the vine-growers of this continent should look forward to largely-increased operations for their industry.

The progress of vine cultivation since the year 1861 is illustrated by the table subjoined. The areas given include the vines producing table-fruit, as well as those cultivated for wine-making, also the young vines not yet in bearing :—

State.	1861.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales	1,130	4,152	4,027	8,281	8,278
Victoria	1,464	5,523	4,923	24,483	27,550
Queensland	40	568	1,212	1,988	2,003
South Australia.....	3,918	5,455	4,202	12,314	19,438
Western Australia	457	692	527	1,004	3,251
Australia	7,009	16,390	14,891	48,070	60,520

At present the area devoted to vines is much larger in Victoria and South Australia than in the other colonies. Of recent years great attention has been paid to the industry in Victoria, and that province in a favourable season produces half the wine made in Australia. Vine-growing has never been carried on to any extent in Tasmania or New Zealand, although there are numerous places in the latter colony suited for growing vines for the manufacture of both wine and raisins. The area under vines in New Zealand in 1899 was returned at 445 acres.

The following tables show the progress made in wine-growing during the last thirty-nine years :—

State.	1861.	1871.	1881.	1891.	1899.
	gallons.	gallons.	gallons.	gallons.	gallons.
New South Wales.....	85,328	413,321	513,688	913,107	739,668
Victoria	47,568	713,589	539,191	1,554,130	933,282
Queensland.....	.....	.....	72,121	168,526	131,045
South Australia.....	312,021	852,315	313,060	861,835	954,367
Western Australia	.....	.....	99,600	166,664	100,000
Australia	444,917	1,979,225	1,537,660	3,604,262	2,858,362

The production of table-grapes during the same period is shown below :—

State.	1861.	1871.	1881.	1891.	1899.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	224	508	1,103	3,694	3,652
Victoria	849	1,545	740	2,791	4,592
Queensland.....	.....	.....	255	1,169	500
South Australia.....	1,161	1,692	1,498	4,590	5,402
Western Australia	.....	.....	.....	.....	400
Australia...	2,234	3,745	3,596	12,244	14,546

Among other produce of the vineyards may be mentioned 9,624 gallons of brandy in New South Wales, and 615 gallons in Queensland ; while Victoria and South Australia produced respectively 21,162 cwt. and 8,445 cwt. of raisins and currants.

It is impossible to tabulate the average wine-yield of all the colonies, as in many instances the acreage under cultivation for wine-making purposes cannot be separated from young unproductive vineyards or areas cultivated for table varieties of the grape only. Making due allowance for this fact, it would appear that the average production for the season 1899–1900, which was a very unfavourable one, was about 160 gallons in New South Wales, 120 gallons in Queensland, 72 gallons in Western Australia, and 58 gallons in Victoria. Taking an average year, the production for Australia may be set down at 190 gallons.

Compared with the wine production of other countries, that of Australia is certainly trifling, but a growing local demand, and the opening

up of a market in England, where Australian wines have obtained some appreciation, make the prospects of the industry sufficiently promising to encourage a hope that the coming years will witness important developments. In 1898, the latest year for which information is available, the world's production was estimated at 2,716,000,000 gallons, to which Australia only contributed 4,000,000 gallons; while in 1899 the production of Australia decreased to under 3,000,000 gallons.

The following table illustrates the progress made in the export of Australian wine to countries outside of Australasia since 1881. It will be noticed that in 1899, the trade with foreign countries had grown to fifteen times the value in 1881, while the number of gallons exported had also increased very largely. The 1899 figures are, exclusive of Queensland, 74 gallons, valued at £35; and Western Australia, 715 gallons, valued at £254:—

State.	1881.		1891.		1899.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	gallons.	£	gallons.	£	gallons.	£
New South Wales..	13,271	3,520	12,368	2,904	8,297	1,827
Victoria	5,588	2,341	142,294	26,152	316,967	38,995
South Australia	1,751	580	227,681	39,054	417,218	51,514
Australia ...	20,610	6,441	382,343	68,110	742,482	92,336

Including the intercolonial as well as the foreign trade, the exports of each colony during the same years are shown below. The figures for 1899 are exclusive of Queensland, 88 gallons, valued at £39; Western Australia, 715 gallons, valued at £254; and Tasmania, 24 gallons, valued at £27.

State.	1881.		1891.		1899.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	gallons.	£	gallons.	£	gallons.	£
New South Wales..	22,377	7,233	54,143	11,644	32,749	7,597
Victoria	12,544	5,388	160,982	32,516	327,832	43,299
South Australia.....	54,001	12,637	285,107	58,282	496,510	77,773
Australia ...	88,922	25,258	500,232	102,442	857,091	128,669

The total value of the grape crop and the average return per acre in the Australian colonies, for the year 1899, will be found below :—

State.	Total value of crop.	Average value per acre—	
		Of Total Area under Vines.	Of Productive Vines.
	£	£ s. d.	£ s. d.
New South Wales	108,500	13 2 2	15 1 8
Victoria	452,300	16 8 4	18 0 0
Queensland	26,200	13 1 7	15 0 0
South Australia	292,900	15 1 4	17 5 0
Western Australia.....	48,800	15 0 0	.....
New Zealand	6,300	15 0 0	.....
Australasia	935,000	15 9 0	17 4 9

The Government of Victoria has attempted to help the wine industry in that colony by establishing wineries. Under safeguarding regulations it undertook to advance up to £3,000 to each company on its formation, and up to the present £8,600 have been advanced to companies at Rutherglen, Stawell, Mooroopna, and Yarrawonga.

Sugar-cane.

The growth of the cane and the manufacture of sugar are important industries in Queensland and New South Wales; but whilst the climate of the former colony renders the employment of white labour in the field almost impossible, the plantations of the latter are worked, as a rule, without the assistance of coloured labour. The Queensland planters usually combine the functions of cane-growers and sugar-manufacturers; but in New South Wales, where the numerous holdings are, as a rule, small in area, the cane is purchased from the planters, principally by the Colonial Sugar Refining Company, whose various crushing-mills and refinery are fitted with machinery of the most modern character. The importation of coloured labour into Queensland has been renewed under stringent regulations for the protection of the Kanakas. The attempt made in 1891 by the planters to solve the difficult problem as to whether successful sugar-growing is compatible with the employment of white labour, by the introduction of Italian farm-labourers under contract to work in the sugar-plantations for a number of years, was a failure. Japanese immigrants have also been introduced.

The area under cane for the years specified was as follows :—

State.	1864.	1871.	1881.	1891.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	22	4,394	12,167	22,262	22,517
Queensland.....	94	9,581	28,026	50,948	110,657
Total	116	13,975	40,193	73,210	133,174

The progress of the industry has been very rapid, especially in Queensland, the area of suitable land in that colony being very large. The area given above includes all the cane planted, whether cut during the year or not. The following table shows the acreage actually cut during the last five years :—

State.	1895.	1896.	1897.	1898.	1899.
	acres.	acres.	acres.	acres.	acres.
New South Wales..... ...	14,398	18,194	12,936	14,578	9,435
Queensland.....	55,771	66,640	65,432	82,391	79,435
Total	70,169	84,834	78,368	96,969	88,870

The total production of cane in Queensland in 1899 was 1,176,466 tons, equal to 14·8 tons per acre, as compared with 170,509 tons, or 18·1 tons per acre, in New South Wales. The yield of sugar per ton of cane varies, of course, with the density of the juice, but in an ordinary season it may be set down at about 9·5 per cent. in Queensland, and 9·8 per cent. in New South Wales.

The production of sugar from cane crushed during the last five years was as given below. The figures are compiled from the returns made by the mill-owners, and in the case of Queensland it is possible that they show something less than the actual production :—

State.	1895.	1896.	1897.	1898.	1899.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	22,213	28,557	27,653	29,110	15,352
Queensland.....	86,255	100,774	97,916	163,734	123,289
Total	108,468	129,331	125,569	192,844	138,641

The following table shows the apparent consumption of sugar in each colony during 1899. Queensland was the only province which was able to meet its own requirements, and spare a quantity of sugar for export. The net export from that colony amounted to 109,313 tons, valued at £1,162,359, almost the whole of which was consigned to the other Australasian colonies.

State.	Quantity Manufactured.	Net Import.	Total Consumption of Sugar.
	tons.	tons.	tons.
New South Wales	15,352	41,226	56,578
Victoria	348	45,926	46,274
Queensland	123,289	109,313*	13,976
South Australia	.....	7,079	7,079
Western Australia	.....	8,356	8,356
Tasmania	.....	7,703	7,703
Commonwealth	138,989	977	139,966
New Zealand	.....	30,344	30,344
Australasia	138,989	31,321	170,310

* Net Export.

The quantity shown above does not necessarily represent the total consumption of sugar during the year, because there may have been a surplus available from previous years, which would have the effect of lessening the import during 1899.

The country of origin of 141,930 tons of the sugar which was imported into Australasia during 1899 can be ascertained, and was as shown below. The balance consisted partly of small quantities imported from other countries, but mostly of re-exports, the original port of shipment of which could not be traced from one colony to another. The quantity shown as imported from Europe was probably beet sugar :—

Country of Origin.	Quantity Imported.
	tons.
Queensland	102,413
Mauritius	6,607
Fiji	25,468
Java	4,615
Hongkong	2,158
Europe	669
Total	141,930

The total value of the sugar crop and the average return per acre, in the sugar-growing colonies of Australia, will be found below for the year 1899 :—

State.	Value of Cane grown.	Average Value per Acre.
	£	£ s. d.
New South Wales	89,500	3 19 6
Queensland	529,500	4 15 8

In connection with the prospects of this important industry, the present duties levied on raw sugar are worth recording. They are as follow :—New South Wales, £3 per ton ; Victoria, £6 per ton ; Queensland, £5 per ton ; South Australia, £3 per ton ; Northern Territory, £5 per ton ; Western Australia, free ; Tasmania, £6 per ton ; New Zealand, £4 13s. 4d. per ton.

Sugar-beet.

The question of cultivating the beet-root for the production of sugar, which is now receiving a good deal of attention in Victoria, is not altogether a new one in the history of that colony, for thirty years ago experiments in this direction were made both on the Government farms and by private growers, and the results obtained were deemed to be so satisfactory that it was confidently predicted by the Melbourne press at the time that in a few years the industry would be established on a permanent basis. But the great hopes which were then entertained were not fulfilled, and in 1874 the Secretary for Agriculture reported that the sugar extracted from roots grown experimentally amounted to 7·09 per cent.—a yield which he considered too low to permit of the establishment of a profitable industry. The history of the cultivation of the beet for sugar in other countries, however, has been one of steady progress since the discovery of the saccharine properties of the root in 1747. In Germany, for example, the percentage of sugar extracted from the beets grown in that country averaged but 5·50 per per cent. in 1836, while at the present time the yield is nearly 14 per cent., the increase having been most regular. To the great improvements in the machinery employed in the mills where the beets are treated this notable advance has been most largely due, but to a large extent it is also attributable to the application of science to the cultivation of the root. Under such circumstances as these, the opinion promulgated in the report of the Secretary for Agriculture could not be taken as unfavourable to the prosecution of experiments in Victoria, and a continuation of the efforts of the Department of Agriculture led to the excellent result of an average yield of 18·10 per cent. of sugar obtained from sixty-four samples of beets grown on the Government experimental farms during the year 1893–4, while roots

privately grown have been declared by the Agricultural Chemist to contain 22½ per cent. of sugar.

Such high yields as these have forced the conclusion that these colonies are fitted by nature to become the home of the sugar-beet. Indeed, in New South Wales, analyses made by the Chemist to the Colonial Sugar Refining Company of roots grown in the New England district, where experiments were conducted, disclosed yields ranging from 15·66 to 24·75 per cent. of sugar. There is little fear, therefore, that with proper care and attention, the cultivation of the beet will not produce good results; also, unlike the sugar-cane, the beet is a true agricultural product, and not only does not exclude other crops from the land but on the contrary invites them, and, as general experience has proved, leads to their greater production by vastly increasing the fertility of the soil. The one thing necessary to ensure success is the establishment of large mills for the production of beet sugar, according to the most modern principles. To attempt to start the industry on a small scale is to invite failure, for the cost of production would be too high. The Victorian Minister of Agriculture, in a report on the prospects of establishing the beet-sugar industry, issued at the end of 1894, made this clear, and estimated that with a factory that could turn out 300 tons per day the financial results would be satisfactory, while with one of greater capacity the cost would be correspondingly reduced. The question is not only one of importance to Victoria, which now imports all its sugar, and imports it largely from countries outside Australasia, but to the other colonies as well. At the present time, when the growing of sugar-cane in New South Wales and Queensland is an important industry, the production is by no means equal to the wants of the people of Australasia, and there is therefore sufficient scope for the immediate cultivation of the beet-root for the extraction of sugar. In addition to this, the pulp of beet-root is a very valuable fodder for cattle, so that its cultivation might be pursued in conjunction with dairy-farming.

On 6th March, 1896, the Victorian Parliament passed an Act empowering the Government to assist in the establishment of the sugar-beet industry by granting loans to duly registered public companies which might be formed for the purpose of erecting mills and equipping them with the necessary machinery and plant for the extraction of sugar from the roots. The company applying for aid must satisfy the Treasurer of the colony of certain conditions, and if he were satisfied that these conditions were likely to be fulfilled, and that the company had a paid-up capital of not less than £20,000, he was authorised to advance to the company a sum not exceeding twice the amount raised by its shareholders.

As a result of these concessions a company was formed in Victoria. This company erected a factory at Maffra, at a total cost of £17,200, and the first campaign ended in June, 1898. The cultivation was further persevered with until May, 1900, when the factory was closed down.

The failure of the industry was ascribed to various causes, the principal one being that the supply of beet was not sufficient, since 9,000 tons was the greatest quantity treated in a campaign by the factory, which was capable of treating 40,000 tons. Want of expert knowledge by the farmers in growing beet-root was another cause of failure; the first crop only produced 9 tons to the acre, and the others were even worse. Dry seasons were also blamed, so that, on the whole, the cultivation of beet in Victoria was not a success. The percentage of sugar produced during the three seasons was as follows :—

1897–98	14·0 per cent.
1898–99	11·8 ,,
1899–1900	14·6 ,,

while the sugar produced had a standard of purity of 80 per cent., 76 per cent., and 85 per cent. respectively.

In August, 1898, the Government of Victoria was called upon to assist the company by an advance of £13,000, in addition to the sum of £50,000 to be advanced under the provisions of the Act of 1896, and at present it is seriously considering the question of putting the beet-sugar industry upon a satisfactory basis.

In New South Wales, although, as already stated, portions of the soil, particularly in the New England district, have been demonstrated to be admirably adapted to the cultivation of beet of excellent saccharine properties, no systematic effort has yet been made towards the establishment of the sugar-beet industry on a commercial basis.

Tobacco.

The cultivation of the tobacco-plant has received attention in the three eastern colonies. The following table shows the area and production of tobacco at various periods :—

Year.	New South Wales.		Victoria.		Queensland.		Australasia.	
	Area.	Production.	Area.	Production.	Area.	Production.	Area.	Production.
	acres.	cwt.	acres.	cwt.	acres.	cwt.	acres.	cwt.
1861	224	2,647	220	2,552	..	.....	444	5,199
1871	567	4,475	299	2,307	44	.....	910	6,782
1881	1,625	18,311	1,461	12,876	68	521	3,154	31,708
1888	4,833	55,478	1,685	13,355	123	1,418	6,641	70,251
1891	886	9,314	545	2,579	790	7,704	2,221	19,597
1892	848	8,344	477	658	318	3,808	1,643	12,810
1893	854	10,858	1,057	8,952	475	4,577	2,386	24,387
1894	716	8,132	1,412	7,155	915	9,571	3,043	24,858
1895	1,231	10,548	2,029	15,223	1,061	7,511	4,321	33,282
1896	2,744	27,468	1,264	7,890	994	8,629	5,002	43,987
1897	2,181	19,718	522	3,419	755	5,703	3,458	28,840
1898	1,405	12,706	78	190	617	3,276	2,100	16,172
1899	546	6,641	155	1,365	745	6,551	1,446	14,557

Owing to over-production and the want of a foreign market, the area devoted to tobacco-culture greatly declined from 1888 to 1892, after which it showed signs of development until 1896, but since then has consistently declined. The Australasian tobacco-leaf has not yet been prepared in such a way as to find acceptance abroad, and until such is accomplished it will be useless to expect the cultivation of the plant to become a settled industry. The soil and climate of Australia appear to be suitable for the growth of the plant, but sufficient care and skill have not been expended upon the preparation of the leaf. The quantity of 70,251 cwt. of leaf produced in 1888 was so greatly in excess of local requirements that very low prices only could be obtained, and a large portion of the crop was left upon the growers' hands. The result was that many farmers abandoned the cultivation of tobacco, so that the area under this crop during 1889 was only 3,239 acres in New South Wales, and 955 acres in Victoria, producing respectively 27,724 cwt. and 4,123 cwt. of leaf—less than half the crop of the previous year. In 1891 the area showed a further decline in the case of New South Wales and Victoria. In the mother colony this decline continued until 1894; but in Victoria and Queensland the smallest area devoted to the crop was during the season 1892. The year 1895 saw a great increase in the cultivation of tobacco in all three colonies, and in New South Wales in 1896 there was again a large extension of the area under the plant, although in Victoria and Queensland the advance made in 1895 was not maintained. Since that year the area under cultivation and the production have both steadily declined in each colony until, in 1899, the total production was only 14,557 cwt, the lowest since 1892. In 1898 the crop in Victoria was almost a complete failure.

The average production per acre of tobacco in 1899, and during the ten years ended 1899, were as shown below:—

State.	Average Production per Acre.	
	1899.	1890–99.
	cwt.	cwt.
New South Wales	12·2	10·2
Victoria	8·8	5·9
Queensland	8·8	5·3
Australasia	10·1	8·4

The Agricultural Department of Queensland is endeavouring to assist the tobacco-growers by the importation of American seed of first quality, suited to the Queensland climate, and, following the example set by Victoria and New South Wales, the services of an American expert have been secured. New Zealand, also, has commenced the cultivation

of tobacco, but so far it is only in the nature of an experiment; and a small area has been planted in the Northern Territory of South Australia. In 1897 the Victorian Government decided to grant a bonus of 3d. per lb. on all tobacco-leaf of approved quality grown in the colony, and cured and shipped under the supervision of the tobacco expert. The bonus is only payable to the actual grower of the leaf, and 3 tons have been assigned as the maximum quantity for which payment will be made to any one grower or association.

The following table shows the imports of tobacco, cigars, and cigarettes for home consumption during 1899 :—

State.	Quantity. lb.
New South Wales	2,411,135
Victoria	2,277,422
Queensland	887,552
South Australia	678,738
Western Australia	755,299
Tasmania	360,945
Commonwealth	7,371,091
New Zealand	1,731,551
Australasia	9,102,642

The total value of the tobacco crop and the average gross return per acre in the Australian colonies, during the year 1899, are given below :—

State.	Total Value of Crop.	Average Value per Acre.
	£	£ s. d.
New South Wales	8,200	15 0 4
Victoria	1,700	10 19 4
Queensland	8,100	10 17 6
Australasia	18,000	12 9 0

Gardens and Orchards.

The cultivation of fruit in Australasia does not attract anything like the attention it deserves, although the soil and climate of large areas in all the provinces are well adapted to fruit-growing. Still, some progress has been made, especially in recent years. In 1899 the proportion of the total cultivation allotted to fruit was 1·8 per cent., and in 1891

2·1 per cent., while in 1881 the proportion was 1·5 per cent. The area per 1,000 persons, in 1899, was 42·0 acres; in 1891, 36 acres; and in 1881, 29·4 acres. Grapes, oranges, apples, pears, and peaches are the principal fruits grown; but with an unlimited area suitable for fruit-cultivation, and with climatic conditions so varied, ranging from comparative cold in New Zealand and on the high lands of New South Wales and Victoria to tropical heat in Queensland, a large variety of fruits could be cultivated. The industry, however, languishes partly on account of the lack of skill and care on the part of the grower, good fruits commanding high prices, while those placed within the reach of the multitude are generally of lower quality; and partly owing to the lack of means of rapid transit to market at reasonable rates. The inferior quality of much of the fruit produced was due to the ravages of fruit pests. The pests were almost wholly imported from Europe and America on fruit and cuttings, and as the orchards of Australia were threatened, and the fruit industry likely to be seriously interfered with, Acts have been passed in all the colonies prohibiting the importation of diseased fruit. The result of this legislation has been wholly beneficial, and if supplemented by legislation aimed at eradicating diseases existing in the orchards themselves, the future of the fruit industry would be assured. The area under orchards and gardens in 1881, 1891, and 1899 was as follows:—

State.	1881.		1891.		1899.	
	Acres.	Percentage to total area under Crops.	Acres.	Percentage to total area under Crops.	Acres.	Percentage to total area under Crops.
New South Wales	24,565	4·3	40,116	4·7	53,997	2·2
Victoria	20,630	1·4	37,435	1·8	50,312	1·6
Queensland	3,262	2·8	9,758	4·0	12,881	3·1
South Australia	9,864	0·4	14,422	0·7	24,001	1·1
Western Australia	.....	...	.....	...	6,742	3·6
Tasmania	6,717	4·5	10,696	6·4	13,172	5·9
Commonwealth.....	65,038	1·5	112,427	2·1	161,105	1·9
New Zealand	16,360	1·5	29,235	2·0	27,354	1·6
Australasia	81,398	1·5	141,662	2·1	188,459	1·8

With the extension of artificial irrigation and the increased facilities for export afforded by the adoption of cool chambers for the preservation of fruit during long voyages, the orchardists of Australasia are now enabled to compete with foreign States in the fruit supply for the English market, which averages about £8,000,000 in value annually.

The Tasmanian fruit trade with England has passed the experimental stage, and every season large steamers visit Hobart to receive fruit for the home market.

The following table shows the import and export trade of each colony in green fruit and pulp for 1899, from which it will be seen that Tasmania is, as yet, the only colony whose export largely exceeds its import, although in both Queensland and South Australia the exports of domestic produce are now well above the imports :—

State.	Imports.	Exports of Domestic Produce.
	£	£
New South Wales	243,758	97,406
Victoria	78,931	43,772
Queensland	86,621	93,219
South Australia	24,041	32,856
Western Australia	16,721	124
Tasmania	19,143	190,956
Commonwealth	469,215	458,333
New Zealand	99,683	1,536
Australasia	568,898	459,869

The total value of the produce of gardens and orchards and the average return per acre in 1899 were as given below :—

State.	Total Value of Crop.	Average Value per Acre.
	£	£ s. d.
New South Wales	434,100	8 0 9
Victoria	522,000	10 7 6
Queensland	186,900	14 10 2
South Australia	444,500	18 10 5
Western Australia	43,500	6 9 0
Tasmania	152,400	11 11 2
Commonwealth	1,783,400	11 1 5
New Zealand	240,600	8 15 11
Australasia	2,024,000	10 14 10

The average returns per acre have but little value for purposes of comparison, as much depends on the proportion of the areas under certain kinds of fruit and under vegetable gardens, which tends to increase or decrease, as the case may be, the general average of a colony.

In New South Wales the smallness of the average is explained by the fact that in a great number of instances, owing to a lack of facilities for disposing of the fruit crops, the produce of the orchards did not reach the markets, and in some cases was not even gathered. In Tasmania stone fruits are principally grown, and the gross returns from these are much smaller than the returns obtained from the cultivation of sub-tropical fruits such as the orange and citron, which tend to increase the average returns in the continental and northern provinces. In South Australia the large area cultivated as market gardens, which return a greater value per acre than orchards, accounts for the high value of production shown.

Minor Crops.

Besides the crops already specifically noticed, there are small areas on which are grown a variety of products, chiefly rye, bere, onions, beans, peas, turnips, rape, mangold wurzel, and hops; but they are not sufficiently important to warrant special mention, except turnips and rape in New Zealand, where no less an area than 551,250 acres was planted with these crops. The area under minor crops in each province in 1899 was as follows :—

State.	Acres.
New South Wales	13,954
Victoria	22,936
Queensland	18,013
South Australia	5,362
Western Australia	1,212
Tasmania	20,402
Commonwealth	81,879
New Zealand	570,295
Australasia	652,174

In 1899 there were 495 acres under coffee in Queensland, which produced on an average 212 lb. per acre. There were also 431 acres under arrowroot, with an average production of 10·9 tons per acre. Small quantities of cotton, also, are grown in Queensland; and it has been found that heavy crops of cotton can be raised at the Pera Artesian Settlement in New South Wales. In 1897 the South Australian Government granted a lease of Bathurst Island, comprising an area of 500,000 acres, to a syndicate, which proposes to plant india-rubber trees on a large scale.

Dissemination of Agricultural Knowledge

Although considerable progress has of late years been made in some directions, yet it must be admitted generally that agriculture in the Australasian colonies has only now passed the tentative stage. The typical Australian agriculturist, relying largely on a bountiful Nature, does not exercise upon his crops anything approaching the same patience, care, and labour that are bestowed by the European cultivator, nor as a rule does he avail himself of the benefits of scientific farming and improved implements to the extent that prevails in America and Europe. It may be expected that improvements will take place in this respect, and that the efforts made by the Governments of the various colonies for the promotion of scientific farming will bear good fruit. In most of the provinces, agricultural colleges and model farms have been established, and travelling lecturers are sent to agricultural centres. At present New South Wales possesses the Hawkesbury Agricultural College and experimental farm, and the experimental farms at Wagga, Wollongbar, Bathurst, Coolabah, and the Pera Bore. Victoria has the two agricultural colleges of Dookie and Longerenong, with experimental farms attached to them, and another farm at Framlingham, together with a viticultural college at Rutherglen. South Australia has an agricultural college and experimental farm at Roseworthy. The Queensland Government established an agricultural college and farm at Gatton in 1896. By a change in the distribution of the money voted for State scholarships, four bursaries have been allotted, entitling the holders to free board and instruction for a period of three years as resident students of the college. New Zealand possesses an agricultural college and an experimental farm at Lincoln, in Canterbury.

In New South Wales experimental cultivation by means of irrigation with artesian and catchment water has been successfully conducted at some of the tanks and bores owned by the State, notably at the Pera Bore. In South Australia a central agricultural bureau in Adelaide, with about eighty branch bureaus in the country, assists the farmers by disseminating valuable information, publishing papers, introducing new economic plants, and improving the breed of dairy cattle. A State school has been established in Adelaide for the purpose of affording instruction to "secondary agricultural pupils." The fees paid by the scholars, who must be over 13 years of age and have passed the compulsory examination, are at the same rate as those paid in the ordinary State schools. In Tasmania, the Council of Agriculture gives valuable advice to farmers concerning improved methods of agriculture, extermination of insect pests, etc.; while Western Australia possesses seventeen agricultural halls subsidised by the Government, where the latest literature of interest to farmers may be examined, and where lectures are delivered on agricultural subjects.

State Advances to Farmers.

The oldest system by which advances of money are made to farmers is probably that which was established, as early as 1770, by the German "Landschaften Bank"; and the principle, assuming different forms according to the circumstances of the countries into which it was introduced, was gradually extended to the other great countries of Europe, with the exception of the United Kingdom, where an unwieldy system of land transfer, and the growing accumulation of large estates, form obstacles in the way of its successful application. Since 1849, mainly by the efforts of Raiffeisen, the German Land Credit Banks have taken the form of purely co-operative institutions, and in this respect they have been followed by Sweden, the Baltic provinces of Russia, and Poland, as well as, to some extent, by Austria-Hungary; but in most of the European countries the institutions may be classed as partly State and partly co-operative. In France alone is the system exclusively administered by the State; and it is the French *Credit Foncier* which has been adopted in Australasia wherever the idea of rendering financial aid to agriculturists has been carried into effect, namely, in the colonies of New South Wales, Victoria, South Australia, Western Australia, and New Zealand; while in Queensland and Tasmania the system has received consideration.

It was not till very recently that New South Wales adopted the principle of advances to settlers. Act No. 1, of 1899, was passed to assist settlers who were in necessitous circumstances, or who were financially embarrassed owing to the droughts. Under this Act a Board was appointed to consider applications for relief, and determine whether such relief should be granted. No advance to any settler is to exceed £200, which is to be repaid in ten years at 4 per cent. per annum. Up to 3rd October, 1900, 4,393 applications had been received for advances, the amount applied for being £377,000. Of these applications, 4,251 have been dealt with by the Board, and 1,564 have been refused. The number of applications approved is 2,687, representing advances to the amount of £193,037. Repayments of principal amount to £9,773, in addition to which £2,948 has been received in interest. The Government has in contemplation the introduction of a scheme somewhat on the lines followed in Victoria, in which the system will be carried on in connection with the Savings Bank.

In Victoria, a section of the Savings Banks Act of 1890 empowered the Commissioners to entertain applications for loans, and to lend sums of money on security by way of mortgage of any lands and hereditaments held in fee-simple free of all prior charges, quit-rents excepted, at such rate of interest as might, from time to time, be fixed by them. The conditions were not very liberal, but they endured for a number of years. Five per cent. was the rate of interest charged, and 2 per cent.

was payable annually in redemption of the principal. Opportunity was taken in the Act for the amalgamation of the Savings Banks, assented to on the 24th December, 1896, to definitely grant advances to farmers under the land-credit system. Under the new Act the Commissioners of Savings Banks are empowered to assist farmers, graziers, market-gardeners, or persons employed in agricultural, horticultural, viticultural, or pastoral pursuits, by making advances, either by instalments or otherwise, upon the security of any agricultural, horticultural, viticultural, or pastoral land held by them, either in fee simple, or under a lease from the Crown in which the rent reserved is taken in part payment of the purchase money of the land demised by such lease. The Commissioners have the option of making such advances either in cash or in mortgage bonds; and it is provided that all advances, together with interest at the rate of 4½ per cent. per annum, are to be repaid in sixty-three half-yearly instalments, or such smaller number as may be agreed upon by the Commissioners and the borrower. From the commencement of the Act to the 30th June, 1899, the Commissioners approved 2,035 applications for loans, aggregating a sum of £914,265. The actual advances made during the financial year 1898–99 amounted to £262,290, of which £231,663 was advanced to pay liabilities, £12,806 to pay Crown rents, and £17,821 to improve resources of land, and to carry on. To enable them to make the necessary advances the Commissioners had sold Treasury bonds to the nominal value of £768,550.

The South Australian Parliament, on the 20th December of that year, passed the State Advance Act of 1895, providing for the establishment of a State Bank for the purpose of making advances to farmers and producers, to local authorities, and in aid of industries, on proper security, consisting either of lands held in fee simple or under Crown lease; the funds for this purpose to be raised by the issue of mortgage bonds guaranteed by the State. The rate of interest was to be a matter of arrangement between the bank and the borrower, the maximum being 5 per cent. per annum. To the 31st March, 1900, the South Australian State Bank, thus established, had advanced £529,881, and received repayments to the amount of £75,329. On that date there were arrears of interest to the amount of £245 outstanding; and £5,608 interest had accrued and become due on the 1st April. In order to enable these advances to be made, mortgage bonds had been sold to the amount of £531,200, of which £77,000 had been repurchased, leaving the amount current at £454,200. The advances made during the financial year 1899–1900 amounted to £65,729.

In Western Australia the Agricultural Bank Act of 1894 authorised the establishment of a bank for the purpose of assisting persons in the occupation, cultivation, and improvement of agricultural lands. Under the provisions of the Act the manager of the bank is empowered to make advances to farmers and other cultivators of the soil on the security of their holdings in fee simple, or under special occupation

lease, or under conditional purchase from the Crown, or under the Homestead Farms Act of 1893. The advances are granted either for the purpose of making improvements on unimproved holdings, or of making additional improvements on holdings already improved, and, under the original Act, could not exceed in amount one-half of the fair estimated value of the improvements proposed to be made. The maximum rate of interest chargeable was fixed at 6 per cent. per annum payable half-yearly, and it was provided that the largest sum to be advanced to any one person shall be £400. Repayment is made in half-yearly instalments of one-fiftieth of the principal sum, to commence on the 1st January or the 1st July next following the expiration of five years from the date of the advance, until the whole amount is repaid with interest. Arrangements can, however, be made for the repayment of advances at shorter intervals, and in larger instalments. For the purposes of the Act, improvements were defined as clearing, cultivating, and ringbarking; but by an Amending Act passed in 1896 the term was extended so as to include fencing, drainage works, wells of fresh water, reservoirs, buildings, or any other works enhancing the value of the holding. The same Act raised the largest sum which can be advanced to £800, reduced the maximum rate of interest to 5 per cent., made provision for the acceptance of pastoral leases as security, and allowed advances to be made up to three-fourths of the estimated value of the proposed improvements. The capital allotted to the Agricultural Bank is £100,000; and to the 30th June, 1900, loans to the amount of £110,395 from 1,039 applicants had been approved. During the financial year 1899–1900, advances to the amount of £12,580 were approved.

In New Zealand the Government Advances to Settlers Act of 1894 provided for the establishment of an Advances to Settlers Office, empowered to lend money on first mortgages of land occupied for farming, dairying, or market-gardening purposes, urban and suburban lands used for residential or manufacturing purposes being expressly excluded from the scope of the Act. At that time one class of loans only was contemplated, viz., loans on mortgage security, which were repayable by seventy-three half-yearly instalments, subject, however, to redemption at any time; but by an Amending Act passed in 1896 authority was given for the granting of fixed loans for any term not exceeding ten years. These loans can only be granted on freehold lands, and are repayable without sinking fund at the end of the period for which they are made. The amount advanced on fixed loan is not to exceed one-half the estimated value of the security; while under the instalment system the Board of Control has power to grant loans up to 60 per cent. of the realisable value of freehold securities, and up to 50 per cent. of the lessee's interest in leasehold securities. In both cases interest is fixed at the rate of 5 per cent. per annum, and the amount advanced cannot be less than £25 nor more than £3,000—the maximum under the 1894 Act having been £2,500. Instalment loans are repayable in 36½

years, in half-yearly payments, at the rate of 5 per cent. for interest and 1 per cent. in redemption of the principal sum. The first meeting of the General Board for the purpose of considering applications for loans was held on 23rd February, 1895; and up to 31st March, 1900, the Board had authorised 8,452 advances, amounting to £2,633,440. The total amount applied for in the 8,452 applications granted in full, or in part, was £3,012,870. 1,004 applicants declined the partial grants offered to them, amounting to £454,000; so that the net advances authorised at 31st March, 1900, numbered 7,448, and amounted to £2,179,440. The security for the advances authorised was valued at £4,359,983. The number of applications received up to 31st March, 1900, was 10,995, and the amount applied for, £3,711,033.

Artesian Wells.

The necessity of providing water for stock in the dry portions of the interior of the Australian continent induced the Governments of the colonies to devote certain funds to the purpose of sinking for water, and bringing to the surface such supplies as might be obtained from the underground sources which geologists stated to exist in the tertiary drifts and the cretaceous beds which extend under an immense portion of the area of Central Australia, from the western districts of New South Wales to a yet unknown limit into Western Australia.

In New South Wales the question of the existence of underground water had long been a subject of earnest discussion, but doubts were set at rest in 1879 by the discovery on the Kallara Run, at a depth of 140 feet, of an artesian supply of water, which, when tapped, rose 26 feet above the surface. The Government then undertook the work of searching for water, and since the year 1884 the sinking of artesian wells has proceeded in a scientific and systematic manner, under the direction of specially-trained officers. Private enterprise, which had shown the way, has also followed up its first successes.

Up to 1900 the Government of New South Wales had undertaken the sinking of eighty-eight wells; of these, eighty-two have been completed, and six are in progress. Of the completed wells, fifty-six are flowing, eighteen are sub-artesian, yielding pumping supplies, one has ceased flowing, being choked, and seven have been failures; these wells represent 135,160 feet of boring, while with the uncompleted wells the total depth bored has been 151,249 feet. From the completed wells about 32,700,000 gallons of water flow every day to the surface. The deepest bore completed is that at the Dolgelly, on the road from Moree to Boggabilla, where boring has been carried to a depth of 4,086 feet; this well yields a supply of approximately 745,200 gallons per diem. The largest flow obtained in the colony is from the Kenmare Bore, on the road from Bourke to Hungerford; the depth of this well is 1,539 feet, and the estimated flow about 2,050,000 gallons per diem. Another important bore is that at Pera, 8 miles from Bourke, on the Wanaaring

road, where at a depth of 1,154 feet a flow of 300,000 gallons per diem is obtained. At this bore the most extensive system of irrigation by artesian water as yet undertaken in the colony is being carried out. An area of 57 acres has been set apart for experimental cultivation by the Government, and certain fruits and other products indigenous to the temperate and torrid zones are being grown with success. Equally good results have been obtained at Native Dog, Barringun, Enngonia, and Belalie bores, on the road from Bourke to Barringun. Lucerne, maize, wheat, tobacco, millet, planter's friend, sugar-cane, date palms, pineapples, bananas, and many other fruits and vegetables of tropical and sub-tropical character have been found to thrive there exceedingly well.

On the road from Wanaaring to Milparinka, once a waterless track, successful boring operations have been carried on. Seven bores have been completed. Four of these give a pumping supply, and two are flowing, yielding an aggregate supply of 2,300,000 gallons daily, and the other is choked and has ceased flowing. Boring operations have been extended farther to the north-west, and two bores have been sunk at Paldrumata and Ocarnoo on the Wilcannia to Wampah-road. These two bores are sub artesian, and yield pumping supplies at depths of 780 and 1,359 feet respectively. Another bore is in progress at Warri Warri. A remarkable flow has also been obtained at the Moree bore, amounting to 1,108,000 gallons daily. This bore has been carried to a depth of 2,792 feet, through formations of the same age as the Ipswich coal measures (*Trias Jura*), thus demonstrating the fact that water can be obtained in other than the lower cretaceous formation.

Much has been done in the way of artesian boring by private enterprise. As far as can be ascertained, 128 private bores have been undertaken in New South Wales, of which 16 were failures, 2 were abandoned and one is in progress. Amongst the most important are two wells on Lissington Holding, one with a flow of 4,000,000 gallons and the other with 3,000,000 gallons per day; one at Cuttabulla (Lila Springs), with a daily flow of 4,000,000 gallons; one at Toulby with 3,500,000 gallons per day; and one at Goondabluie with 3,000,000 gallons per day. From the private wells approximately 45,000,000 gallons are discharged daily.

A better idea of the value of artesian wells to the community will be obtained when it is known that the aggregate daily flow of underground water in New South Wales is now approximately 78,000,000 gallons, and that, in addition, large supplies can be pumped from sub-artesian wells. The average depth of the eight-two wells completed by the Government is 1,648 feet 4 inches, with a range from 120 to 4,086 feet, while the temperature of the water varies from 80 to 139 degrees Fahrenheit. The total cost of the wells (including actual boring, casing, carriage, and incidental expenses) was £243,938 4s. 7d., or an average of £2,973 12s. 9d. per bore, or £1 16s. 1d. per foot.

The latest information available regarding the artesian water supply of Queensland extends only to 30th June, 1898, when the Hydraulic Engineer reports that 41 bores had been completed by the Water Supply

Department, of which 16 were successful, one gave a pumping supply, and 24 had been abandoned, or their progress was uncertain. In addition 11 bores had been sunk by the Railway Department of which 2 were successful; and 10 by Local Government authorities of which 5 were successful. Private bores to the number of 582 had also been undertaken, and of these 356 were attended with success, and 157 were abandoned or their progress was uncertain. The total daily flow of the Government bores is given at 8,400,000 gallons, and the total continuous yield from 376 bores, Government and private, at 213,953,000 gallons, in addition to which 55 sub-artesian wells have 24,950,000 gallons of water pumped from them daily. The deepest Government bore is at Winton, and reaches 4,010 feet, while the most copious supply, namely, 3,000,000 gallons per day, is obtained at the Charleville bore. The deepest private bore, and also the deepest bore in the Colony, is the Bothwell on the Bimerah run, and reaches 4,860 feet. The largest supplies are obtained from four bores on the Boatman and Elmina runs, two of which yield 3,000,000 gallons each, one yields 3,500,000 gallons, and the other 4,000,000 gallons daily. The Goora and Horton Vale bores in the Cunnamurra and Euro district also yield 4,000,000 gallons per day. The total depth bored up to 30th June, 1898, was 717,912 feet, the average depth per bore being 1,177 feet nearly. At Back Creek and No. 3 bore, Bingara, water of so low a temperature as 70 degrees Fahrenheit was flowing; while at Dagworth, the water had a temperature of 196 degrees. Large areas are served by the water from the bores for irrigation purposes, the total at the middle of 1898, according to the returns received being 5,229 acres, of which 4,199 acres were under sugar-cane; and in addition several stations, which made no returns, also used the water for purposes of irrigation.

At the end of 1897, the latest date for which any information is available, the Water Conservation Department of South Australia had completed eighty-seven bores, of which, however, only thirty-three were successful. These are spread over widely-distant parts of the territory, successful bores existing at Nullarbor Plains, on the boundary of Western Australia; at Oodnadatta, the present terminus of the Northern Railway system; and at Tintinara, in the south-eastern extremity of the colony. The bore at Tintinara has proved that the marine tertiary area is water-bearing. For purposes of water conservation, the colony may be divided into four large areas, namely, the West Coast division, where 12 bores were attempted and 3 were successful; the Far North and North-west division, where 13 out of 32 bores were successful; the Central division, where 15 out of 39 bores were a success; and the South-east division, where 2 out of 4 bores were successful. Of the bores on the west coast, Robert's Well No. 1, on Nullarbor Plains, reaches a depth of 777 feet, and gives a daily supply of 68,000 gallons; the total supply from the three flowing wells being 133,000 gallons. Much greater depths have been reached in the far north; a well at Kopperamanna being the deepest in the colony, viz., 3,000 feet.

This well gives a daily supply of 800,000 gallons. A well at Strangways, and another at Coward, give daily supplies of 1,200,000 gallons each—the maximum obtained in South Australia. The flowing bores in this division gave a daily yield of 3,928,200 gallons. The wells in the central area are much less important, the largest supply, viz., 108,000 gallons daily, being obtained from one in the vicinity of Gawler. The deepest well in this division is situated at Percyton, and reaches 930 feet. The total daily supply in the central area amounts to 354,400 gallons. The two successful wells in the south-east have a daily outflow of 34,000 gallons. The total daily supply for the whole colony reaches, therefore, 4,449,600 gallons. According to a report by the engineer-in-chief, it would appear that the South Australian Government had expended £19,202 on machinery and £148,689 in boring operations, or a total of £167,891, at the end of the year 1897.

The Government of Western Australia, following the example set by those of the eastern colonies, has sunk a number of wells in the direction of the Coolgardie gold-field, and of the South Australian border, and has let contracts for others. So far as official data show, there were at the end of 1899 sixteen artesian wells in the colony, reaching an aggregate depth of 14,165 feet, and yielding a total flow of 4,806,500 gallons per diem. In addition to these, there are three sub-artesian wells of an aggregate depth of 2,511 feet, from which 531,700 gallons of water can be pumped daily. The deepest bore, 1860 feet, is at South Perth. The municipal bore at Guildford has the largest yield, viz., 1,120,000 gallons per day.

In the province of Victoria the Government has since the year 1886 executed several experimental borings, but so far the results have not been encouraging. Artesian water was, however, struck at Sale, in Gippsland, as early as the year 1880, but the bore is not now used.

It is unfortunate that later information than that quoted in regard to some of the colonies, notably Queensland and South Australia, cannot be given ; but there seems to be a singular apathy on the part of the Departments concerned in all the colonies in publishing reports on this most important service. The statistics are presented for the two above-named colonies for the dates referred to, as it is probable that no great amount of work has been carried out during the last year or two in the direction of boring for artesian water.

MINERAL RESOURCES.

ALMOST all the principal metals of economic value are found in Australasia, and many are common to several colonies. In dealing with the occurrence and value of mineral deposits, a classification has been made into noble and other metals, carbon minerals, salts, stones and clays, and diamonds and other gem stones.

GOLD.

Gold, the most valuable of noble metals, is found throughout Australasia, and the present prosperity of the colonies is largely due to discoveries of this metal, the development of other industries being, in a country of varied resources, a natural sequence to the acquisition of mineral treasure. Settlement in Australia was still young when many-tongued rumour spoke of the existence of the precious metal, but it was not until the 16th February, 1823, that the Government was officially apprised of a discovery destined to be the precursor of a prosperity seldom surpassed in the history of nations. On the date mentioned Mr. Assistant-Surveyor M'Brien reported that at a spot on the Fish River, about 15 miles east of Bathurst, he had discovered gold. Mention is made in the early records of New South Wales of several other finds, but it remained for Count Strzelecki and the Rev. W. B. Clarke to demonstrate the existence of the precious metal in payable quantities, and to assert their belief in its abundance, an opinion strongly supported in England by several eminent authorities, and substantiated by Hargraves' discovery in the year 1851. The gold-fields of Lewis Ponds and Summer Hill Creek had hardly been opened up when, on the day that witnessed the severance of the Port Phillip district from the mother colony of New South Wales, Mr. J. M. Esmond discovered gold in Victoria. Shortly afterwards a rush set in for Ballarat, and the gold fever took possession of Australia. The following year (1852) saw gold found in South Australia and Tasmania; the rush to Canoona, in what is now Queensland, took place in 1858; and gold was discovered in New Zealand in the same year, though it was not until 1861 that a large population was, by the prospect of rapidly obtaining wealth, attracted to the last-mentioned colony. The last of the seven colonies in which extensive deposits of the precious metal were found was Western Australia, to which province a great rush set in but a few years ago, although gold was discovered in payable quantities in 1882.

From the date of its first discovery, gold to the value of nearly 429 million pounds sterling, has been obtained in Australasia. Victoria, which has in a period of forty-eight years contributed more than 254 millions to this total, has since the year 1897 given place to Western Australia as the largest annual producer of the precious metal, the yield of the latter colony in 1899 exceeding that of Victoria by more than two-and-three-quarter millions. Nevertheless, the output for the colony has shown a steady increase during recent years, the yield of 854,500 oz. in 1899 being the highest since the year 1882. Victorian gold is remarkably pure, and the quantities just quoted represent 804,235 oz. fine, so that on an average Victorian gold is worth £4 per oz. Several causes have contributed to this satisfactory development of gold-mining. Amongst these may be mentioned the great improvement in gold-saving appliances during recent years, and the application of a large amount of new capital to the working of new mines. The State, too, has done its share in helping the industry, and the Mines Development Act of 1896 authorised the expenditure of £140,000 during the ensuing three years. Mining tracks have been cut through the mountainous districts on a much more extended scale than hitherto, with the object of opening up the areas which were found difficult of access; and in other directions efforts have been made to stimulate the industry. In 1899 the Sandhurst district, with 235,596 oz., supplied the largest portion of the gold yield of the colony, followed by the Ballarat district with 208,920 oz., and Beechworth with 104,278 oz. There were 30,114 men engaged in the search for gold in Victoria at the end of 1899. Of these, approximately, 1,500 were Chinese, but the miners of this race are steadily decreasing in number. The value of machinery on the gold-fields of Victoria may be set down at £1,914,270.

Queensland promised at one time to overtake Victoria in the value of its annual gold yield, but in 1899 its production amounted to £2,838,119, as compared with £3,418,000 in the southern colony. Queensland, as a gold-producer, therefore, ranks third amongst the Australian colonies. The actual quantity of gold won was 946,894 oz., representing 667,792 oz. fine; the average value was, therefore, about £3 per oz. The yield for 1899 is the largest yet recorded. This result is due to the now universal application, wherever practicable, of the cyanide process to the treatment of the mill tailings, and the gold recovered in this manner last year constituted a little more than one-third of the total yield. The increase over the yield of 1898 is not so marked as is the case in some of the neighbouring provinces, but on all the larger fields much energy has been devoted to developing mines which will probably become productive during the current year. In some of the northern fields the enforced idleness of the mills, from want of water, prevented many thousands of tons of stone being treated, the contents of which would otherwise have been added to the year's output. To the production of the colony Charters Towers contributed

511,021 oz., valued at £1,357,517, the largest yield in the history of the field. Charters Towers is a field of deep sinking, and much interest has attended the progress of the shaft of the Day Dawn Consolidated Mine. In January, 1900, a gold-bearing reef was intersected at a depth of 1,815 feet.

The yield of the Mount Morgan gold-field is almost entirely that of the celebrated Mount Morgan mine, which, in 1899, produced 172,389 oz. of gold, valued at £703,449, or about one-fourth of the total production of the colony. The average yield of all ore treated—15 dwt.—was slightly less than that of the preceding year, the decrease being attributed to the inclusion of large quantities of ore that had been left in the mine as too poor for profitable treatment before the initiation of the present system of reduction. Large additions have lately been made to the machinery, the total value now being £466,765. A dam capable of holding 225 million gallons, from which it is proposed to furnish the town supply, has also been constructed. No less than 2,000 men are employed in the mine and works. The number of men engaged in gold-mining in Queensland at the end of 1899 was 9,758, of whom 710 were Chinese. As in Victoria, the number of Chinese finding employment on the gold-fields is decreasing. The estimated value of machinery on the Queensland gold-fields during 1899 was £1,591,963.

In New South Wales the greatest annual production of gold occurred in 1852, soon after the first discovery of the precious metal, when it was valued at £2,660,946. The only other year which saw a production in excess of two millions sterling was 1862, the amount reaching £2,467,780. In 1874 the yield had fallen to 271,166 oz., valued at £1,041,614, and thenceforth the industry declined considerably in importance, reaching its lowest point in 1888, when only 87,541 oz., valued at £317,241, were produced. From that date a steady improvement took place, and in 1894 the Government took the step of furnishing large numbers of the unemployed with miners' rights and free railway passes, and sending them to the abandoned alluvial fields as fossickers. This action, with the increased attention paid to quartz-mining, nearly doubled the production, the quantity obtained during the year being set down at 324,787 oz., valued at £1,156,717; while in 1895 the yield reached 360,165 oz., of a value of £1,315,929—the highest since 1873. In 1896, however, this yield was not maintained, the production amounting to 296,072 oz., valued at £1,073,360. Since 1896 there has been a decided improvement in the annual production. During 1897, 302,817 oz., valued at £1,128,164, were won, and in the following year the production reached 340,493 oz., of a value of £1,244,330. In 1899 the production was 496,196 oz., valued at £1,751,815, making a total yield to date of 12,862,922 oz., of a value of £47,546,013. The quantity and value of gold won in 1899 far exceeded the return of the previous year, and, with the exception of five years, was the highest total recorded. In the absence of any new finds of importance, the increase is doubtless due to the steady improvement

in the methods of mining and in plant used for treating the ores, and also to the inauguration of the gold-dredging system. This is quite a new form of mining in New South Wales, and is receiving much attention. At the end of 1899 the machinery on the gold-fields was valued at £861,828. The principal seats of alluvial mining in the colony are the Bathurst and Mudgee districts, and the country watered by the various feeders of the Upper Lachlan, and also the Tumut and Adelong and Braidwood districts; while the principal quartz-veins are situated near Adelong, Armidale, Bathurst, Hill End, Orange, Parkes, and Wyalong. The most important finds in recent years were the Mount Drysdale gold-field, in the Cobar district, discovered in 1893, and the Wyalong field, situated in the Lachlan district. The first prospecting claim on the latter was registered on the 26th December, 1893, and in the early part of the following year there were over 10,000 persons on the ground. The population now numbers about 4,200, of whom 1,600 are miners. In 1899 the quantity of gold obtained from this district, which now holds the premier position among the gold-fields of the colony, was 44,675 oz., valued at £178,700.

Until quite recently, Western Australia was considered to be destitute of mineral deposits of any value, but it is now known that a rich belt of mineral country extends from north to south. The first important discovery was made in 1882, when gold was found in the Kimberley district, but it was not until a few years later that this rich and extensive area was developed. In 1887 gold was found at Yilgarn, about 200 miles east of Perth, the find possessing importance as the precursor of the discovery of the immense tracts of gold-bearing country, the knowledge of the existence of which has drawn population from all parts of Australasia and brought the colony into the prominent position which it occupies at the present time. General attention was first attracted to these fields by further discoveries at Southern Cross, to the east of Yilgarn; and the sensational finds at Coolgardie, which followed in 1892, resulted in a rush to Western Australia which was reminiscent of the experiences of the fifties in the older-settled portions of the continent. Thereafter, before the march of the prospector, the known gold-bearing area was rapidly extended, and in 1894 the country was divided into separate gold-fields, so extensive were the preparations for its exploitation. At the present time, there are eighteen gold-fields in the colony, the most important, from the point of production in 1899, being East Coolgardie, Coolgardie, and North Coolgardie, in the eastern district; and Murchison, in the central district. For the past two years Western Australia has held the premier position among the Australasian colonies for its gold production, and the wonderful progress of the industry in 1898 has not only been fully maintained during 1899, but in many respects has surpassed anticipations. Steady progress has been exhibited on nearly all the gold-fields, but it is the East Coolgardie field which was mainly responsible for the increased production during 1899, which was nearly 57 per cent. higher than in 1898.

North-east Coolgardie was the only gold-field which did not show an increase for the year, but this may be accounted for by the partial depletion of the alluvial deposits near Kanowna. It is estimated that there are now 21,000 miners actively engaged on the gold-fields. In 1899 the production amounted to 1,643,877 oz., valued at £6,246,733, as compared with 1,050,184 oz., valued at £3,990,698 in 1898, and 30,310 oz., valued at £115,183, in 1891.

In New Zealand, the production of gold in 1899 was valued at £1,513,173—the highest yield since 1873. There has been a decided improvement in the production during the last two years, due to the completion of the extensive operations of a developmental character that were carried out on many of the mining properties acquired by English capitalists. The introduction of capital has enabled the claims not only to be opened up at greater depths, but also to be worked in a more systematic and economical manner. The improved appliances introduced in dredging and hydraulic elevating and sluicing machinery have made it possible to treat material at a cost of from 1d. to 3d. per cubic yard, so that alluvial drifts containing only a few grains of gold to the ton can be profitably worked. A great deal of attention is, therefore, being paid to the auriferous deposits in river-beds and in deep wet ground on the southern gold-fields. It is estimated that 85 dredges, each of which is said to have cost between £2,500 and £8,500, are now working in Otago, Southland, and the West Coast districts, and others are in course of construction. As showing the profitable nature of dredging, the value of the gold obtained in this manner during the year ended 31st March, 1899, was £169,689, and constituted 61·4 per cent. of the alluvial gold exported.

Prospecting work is still being vigorously pursued in the Auckland district, especially in the dense bush localities which have hitherto escaped exploration on account of their inaccessibility. It is stated that numerous lines of reef have been discovered, and that a large number of men are engaged in opening up the lodes.

In 1899 the number of gold-miners in the colony was 13,291, of whom 1,716 were Chinese.

Although payable gold was found in Tasmania in 1852, yet it was not until the seventies that the metal was mined for on an extensive scale, the total production to the end of 1870 being less than 4,000 oz. Beaconsfield is the principal gold-field in the colony. It is situated on the west side of the river Tamar, 26 miles north-west of Launceston, and formerly produced a large quantity of alluvial gold, while the existence of a deep lead carrying good gold has now been proved. The Tasmania mine, on this field, is the largest gold-producer in the colony, and up to the end of 1899 yielded 472,727 oz., valued at £1,723,294, out of which £706,072 has been paid in dividends. Although its yield is at present small, the Lefroy field has been another important centre of gold-production. The reefs are now being proved to a greater depth. At Mathinna a large quantity of gold has also been obtained. The

principal mine on this field is the New Golden Gate, the deepest in the colony, its main shaft being 1,330 feet. This mine has yielded 144,000 oz. of gold, valued at about £533,000, and at 31st December, 1899, had paid £240,000 in dividends. At Mangana, active prospecting has been going on for some time, and some rich stone has been obtained. In the Western District a little alluvial gold is obtained, while north of the Pieman River there is a large extent of auriferous country, but owing to the dense vegetation prospecting is difficult.

The gold-mining industry of the colony has made very satisfactory progress during the last ten years; indeed, the yield in 1899, amounting to £327,545, has never been exceeded, and was more than 10 per cent. higher than the previous record production in 1897, during which year gold to the value of £296,660 was won.

Of all the Australasian colonies, South Australia has produced the smallest quantity of gold, the total output from the commencement of mining operations being valued at less than two and a quarter millions sterling. In the province proper the yield is very small, amounting to but 3,893 oz. in 1899, the balance of 19,230 oz. being obtained from the Northern Territory. Here the mines are largely in the hands of Chinese, but a number of properties have recently been acquired by an English company, which has erected the works necessary for their proper development. Included in the total of 1,486 men engaged in gold-mining in the Northern Territory in 1899, were 1,372 Chinese. About a fourth of these Chinese are physically incapable of doing a fair day's work, and are dangerous from a sanitary point of view. Possessed of no means whatever, and with no proper tools for the search for the precious metal, they eke out a miserable existence by mining a little alluvial gold.

The following table gives the value of gold raised from the commencement of mining to the close of the year 1899, with the proportion due to each province:—

State.	Production of Gold.	
	Value.	Proportion raised in each State.
	£	per cent.
New South Wales	47,546,013	11·1
Victoria	254,156,820	59·3
Queensland	47,338,074	11·1
South Australia	2,212,787	0·5
Western Australia	16,906,449	3·9
Tasmania	4,282,192	1·0
Commonwealth	372,442,335	86·9
New Zealand	55,966,498	13·1
Australasia	428,408,833	100·0

It will be readily understood from the foregoing figures how Victoria, although in area the smallest of the group with the exception of Tasmania, achieved the foremost position amongst the colonies, and retained that place so long as the powerful attraction of gold continued. But although the discovery of such extraordinary deposits as those of Mount Morgan, in Queensland, may astonish the world and give princely dividends to shareholders, the thirst for gold—so powerful in the past—cannot now entice any considerable proportion of the population from other pursuits, and this notwithstanding that only a small portion of the auriferous area of the continent has been explored, and a still smaller portion fully developed.

The production of gold, which had been declining steadily for many years, reached the lowest point in 1886. Since then there has been a marked revival, and, as will have been gathered from the previous pages, there is considerable activity in gold-mining in all the colonies at the present time. The production of gold in each province in 1899, with the quantity obtained from alluvial deposits and the yield from quartz crushings where such information is available, is given below :—

State.	Weight of Gold.			Value of Gold.	
	Alluvial.	Quartz.	Total.	Total.	Proportion raised in each State.
	oz.	oz.	oz.	£	per cent.
New South Wales	91,477	404,719	496,196	1,751,815	10·8
Victoria	270,405	584,095	854,500	3,418,000	21·1
Queensland	21,794	925,100	946,894	2,838,119	17·6
South Australia	.....	.....	23,123	79,041	0·5
Western Australia.....	63,208	1,580,669	1,643,877	6,246,733	38·6
Tasmania	11,513	72,479	83,992	327,545	2·0
Commonwealth ...	.....	.....	4,048,582	14,661,253	90·6
New Zealand	....	....	389,558	1,513,173	9·4
Australasia	.....	.....	4,438,140	16,174,426	100·0

The average value of gold won by each miner is given below, but as the conditions under which mining is carried on are by no means the same in every colony, the figures, which vary considerably, may be somewhat misleading. It is probable that the number of gold-miners in several of the provinces is largely overstated, otherwise the industry must be carried on at a great loss; and this will be the more apparent when it is remembered that a fairly large quantity of gold is obtained with other metals, the men employed at the working of which are not classified as gold-miners. Most likely many of the men employ themselves in mining for only a portion of their time, and devote the rest

to more remunerative pursuits. But when full allowance is made on this score, it will be evident that, in some colonies at least, the search for gold is not a profitable occupation. The small return for South Australia is due to the large number of Chinese engaged in the industry, many of them not possessing proper appliances for working the claims. The following table shows the number of miners at work in 1899, with the quantity and value of gold won per man :—

State.	Miners Employed.	Average production of Gold.	
		Quantity.	Value.
	No.	oz.	£ s. d.
New South Wales	19,348	25·65	90 10 10
Victoria	30,114	28·38	113 10 0
Queensland	9,758	97·04	290 17 0
South Australia	1,986	11·64	39 16 0
Western Australia	21,000	78·28	297 9 3
Tasmania	1,296	64·81	252 14 8
New Zealand	13,291	29·31	113 17 0

The greatest development of quartz-reefing is found in Victoria, some of the mines being of a great depth. At the end of 1899 there were seven mines in the Bendigo district over 3,000 feet deep, and fourteen over 2,500 feet deep. In the Lazarus mine a depth of 3,424 feet had been reached, and in Lansell's 180 Mine, 3,352 feet. On other fields there were seven mines over 1,400 feet deep, the principal of which were the South Star mine in the Ballarat district, where the shaft is down 2,520 feet, and the Magdala mine in the Stawell district where a depth of 2,410 feet has been reached.

A notice of gold-mining would be incomplete without some reference to the remarkably large finds made at various times. Information on this point is meagre and not altogether reliable, as doubtless many nuggets were unearthed of which particulars were never published. Victoria's record is the best, and includes the following nuggets :—

	lb.	oz.	dwt.
"The Welcome Stranger," found 9th February, 1869	190	0	0
"The Welcome," found 9th June, 1858	184	9	16
One found at Canadian Gully, 31st January, 1853	134	11	0

And others of the following weights :—98 lb. 1 oz. 17 dwt., 93 lb. 1 oz. 11 dwt., 84 lb. 3 oz. 15 dwt., 69 lb. 6 oz., 52 lb. 1 oz., 30 lb. 11 oz. 8 dwt., and 30 lb. 11 oz. 2 dwt.

New South Wales can boast of having produced some splendid specimens. In 1851 a mass of gold was found on the Turon, weighing 106 lb.; another, from Burrandong, near Orange, produced when melted at the Sydney Mint 1,182 oz. 6 dwt. of pure gold; and a third, the

"Brennan," was sold in Sydney in 1851 for £1,156. During 1880–82 several nuggets were discovered at Temora, weighing from 59 oz. to 1,393 oz.; and others, of 357 oz., 347 oz. (the "Jubilee"), 200 oz., 47 oz., and 32 oz. respectively, were found during the year 1887 in various parts of the colony. Veins of gold of extraordinary richness have been worked in New South Wales. In January, 1873, at Beyers and Holterman's claim, at Hill End, 1·02 cwt. of gold was obtained from 10 tons of quartz, and a mass of ore, weighing 630 lb. and estimated to contain £2,000 worth of gold, was exhibited. The Mint returns for this mine during the year 1873 were 16,279·63 oz., valued at £63,234 12s.; obtained from 415 tons of stone. From Krohman's claim, at Hill End, gold to the value of £93,616 11s. 9d. was obtained during the same year. The foregoing figures, however, are insignificant when compared with the enormous yield of the Mount Morgan Mine, in Queensland, which, has paid over £5,400,000 in dividends. This mine, which may be designated one of the wonders of the world, is a huge mound of ore, highly ferruginous, the peculiar formation, in the opinion of the Government Geologist of Queensland, being due to the action of thermal springs. To the end of May, 1900, 2,156,273 oz. of gold had been won from 1,293,963 tons of ore, yielding an average of 1 oz. 13 dwt. 8 gr. per ton of ore treated.

For the ten years ended 1899, the world's production of gold is estimated to have been as follows:—

Year.	Value.	Year.	Value.
	£		£
1890	23,780,000	1895	41,413,000
1891	26,130,000	1896	44,077,000
1892	29,260,000	1897	49,023,000
1893	31,110,000	1898	58,987,000
1894	38,035,000	1899	64,138,000

Of the production of £64,138,000 in 1899, the Australian colonies produced 25·2 per cent.

Silver.

Silver has been discovered in all the colonies, either alone or in the form of sulphides, antimonial and arsenical ores, chloride, bromide, iodide, and chloro-bromide of silver, and argentiferous lead ores, the largest deposits of the metal being found in the last-mentioned form. The leading silver mines are in New South Wales, the returns from

the other colonies being comparatively insignificant. Up to the year 1882 the quantity of silver raised in New South Wales was very small, but in that and the following years extensive discoveries of the metal, associated principally with lead and copper ore, were made in various parts of the colony, notably at Boorook, in the New England district, and later on at Sunny Corner, near Bathurst, and at Silverton and Broken Hill on the Barrier Ranges in the Western district. The Sunny Corner Silver mines in 1886 paid handsome dividends, and produced £160,000 worth of silver, but since that period the yield has largely fallen off.

The fields of the Western district of New South Wales have proved to be of immense value. The yield of silver-lead ore in the Broken Hill and Silverton districts during 1899 was valued at £1,588,856 ; while the machinery employed was valued at £610,000. This is much less than the value previously set down, the reduction being chiefly due to the removal of machinery to Port Pirie, in South Australia, where the smelting operations of the Proprietary Company are now wholly carried on. The aggregate output of the mines in the Barrier country to the end of the year named was valued at £25,969,594. This rich silver-field, which was discovered in 1883 by Charles Rasp, a boundary rider on Mount Gipps Run, extends over 2,500 square miles of country, and has developed into one of the principal mining centres of the world. It is situated beyond the river Darling, and close to the boundary between New South Wales and South Australia. In the Barrier Range district the lodes occur in Silurian metamorphic micaceous schists, intruded by granite, porphyry, and diorite, and traversed by numerous quartz reefs, some of which are gold-bearing. The Broken Hill lode is the largest as yet discovered. It varies in width from 10 feet to 200 feet, and may be traced for several miles, the country having been taken up all along the line of the lode, and subdivided into numerous leases, held by mining companies and syndicates.

The Broken Hill Proprietary Company hold the premier position. They have at Port Pirie, in the neighbouring colony of South Australia, a complete smelting plant on the latest and most approved principles, and have enlisted the services of competent managers, whose experience has been gained in the celebrated silver-mining centres of the United States. From the commencement of mining operations in 1885 to the end of May, 1899, the company treated 4,125,729 tons of silver and silver-lead ores, producing 98,558,617 oz. of silver and 385,793 tons of lead, valued in the London market at £20,560,959. Dividends and bonuses to the amount of £6,968,000 have been paid, besides the nominal value of shares from the several "Blocks." The sum spent in the erection and construction of plant, from the opening of the property, has been about £991,680. The mine wages and salary sheet for the twelve months represented a sum of £367,013, including £50,417 paid to contractors, and £51,953 for quarrying. The net profit for the year was £230,000.

The quantity and value of silver and silver-lead ore exported by New South Wales to the end of 1899 is shown in the following table :—

Year.	Silver.		Silver-Lead.			Total value.
	Quantity.	Value.	Quantity.		Value.	
			Ore.	Metal.		
Up to	oz.	£	tons cwt.	tons cwt.	£	£
1882	765,397	187,429	203 12	.....	5,385	192,814
1883	77,066	16,488	105 17	.....	1,625	18,113
1884	93,660	19,780	4,668 1	.....	123,174	142,954
1885	794,174	159,187	2,095 16	190 8	107,626	266,813
1886	1,015,434	197,544	4,802 2	.....	294,485	492,029
1887	177,308	32,458	12,529 3	.....	541,952	574,410
1888	375,064	66,668	11,739 7	18,102 5	1,075,737	1,142,405
1889	416,895	72,001	46,965 9	34,579 17	1,899,197	1,971,198
1890	496,552	95,410	89,719 15	41,319 18	2,667,144	2,762,554
1891	729,590	134,850	92,383 11	55,396 3	3,484,739	3,619,589
1892	350,661	56,884	87,504 15	45,850 4	2,420,952	2,477,836
1893	531,972	78,131	155,859 1	58,401 3	2,953,589	3,031,720
1894	846,822	94,150	137,813 8	42,513 2	2,195,339	2,289,489
1895	550,142	81,858	190,192 19	29,687 7	1,560,813	1,642,671
1896	202,789	26,518	267,363 1	19,573 4	1,758,933	1,785,451
1897	150,005	16,711	270,913 14	18,105 7	1,681,528	1,698,239
1898	533,059	59,278	388,460 4	10,108 13	1,644,777	1,704,055
1899	692,036	76,913	424,337 5	20,289 10	1,993,744	2,070,657
Total	8,798,626	1,472,258	2,187,657 0	394,117 1	26,410,739	27,882,997

This amount was approximately made up of 133,656,650 ozs. of silver, valued at £21,559,566 ; and of 523,179 tons of lead, valued at £6,323,431. It will be seen that the production of silver in New South Wales rapidly increased until 1891, when it exceeded in value the largest annual production of gold, even in the palmiest days of the diggings. Since that year, however, as will be seen from the returns, the ore now being worked does not carry the same quantity of silver or lead as formerly, while a heavy fall in the price of the metal has considerably reduced the value of what has been won. The number of miners engaged in silver and lead mines in 1899 was 7,893, and the average value of mineral won by each miner engaged amounted to £262 6s. 10d., as compared with £266 8s. 6d. in 1898, £273 14s. 8d. in 1897, and £321 8s. 3d. in 1896.

A company has been formed in London for the purpose of acquiring the rights in New South Wales of a new process for the treatment of sulphide ores. Works have been constructed at Dapto, near Lake Illawarra, and it is intended to smelt refractory gold ores as well as silver ores. The machinery is capable of treating 200,000 tons yearly. Another company has erected at Cockle Creek, near Newcastle, electro-

metallurgical works, which are giving employment to a large number of men, and where experiments with the sulphide ores are also being made.

Although indications of silver abound in all the other colonies, no fields of great importance have yet been discovered, the value of the yield of Australasia to the end of 1899, exclusive of that of New South Wales, being only £3,878,168. Next to New South Wales as a silver-producing province, but far from the position occupied by the former colony, stands Tasmania, where the industry has been steadily developed during the last few years. During 1897 the production of silver and silver lead was valued at £197,225. In 1898 the value of the output had increased to £270,893, and in 1899 to £377,788. This increase is mainly due to the beginning of smelting operations by the Tasmanian Smelting Company. Works have been erected on the Mount Zeehan field, and the Company has thus opened up a market for large quantities of low grade ore, which otherwise could not have been profitably treated. In the Mount Zeehan and Dundas districts almost the whole quantity produced in the colony is obtained. In the first-named district argentiferous lead ore has been found over 30 square miles of country ; and the Mount Dundas field, almost adjoining, extends north as far as the Pieman River. The principal mine at Mount Zeehan is the Western, which has paid £102,000 in dividends. A little mining is carried on at the Whyte River and Hazlewood fields ; and at the Magnet Range, near Waratah, the Magnet Silver Mining Company has made great progress. Very high class ore has been opened up, and it is the intention of the company to connect the mine with Waratah by tramway, as the increasing output is somewhat in excess of the existing facilities for delivering the ore at the Waratah railway station.

Silver is found in various districts in Queensland, but the greatest activity is at present being shown at Stanthorpe, on the border of New South Wales, and it is from this field that the largest proportion of the production of that colony was raised in 1899. In that year the output was valued at £15,671, and the industry gave employment to 337 miners. In New Zealand silver is found in various localities, principally on the Te Aroha, Thames, and Coromandel fields, but the metal is generally sought in conjunction with gold-mining. The production of the colony during the year 1899 was 349,338 oz., valued at £40,838.

There are no silver-mines in Victoria or Western Australia, the small amount of silver produced by the former colony being found associated with gold. The quantity of fine silver extracted from gold during 1899 at the Melbourne Branch of the Royal Mint was 87,782 oz. The production of silver in South Australia is very limited, and it would seem that the argentiferous lead-ore fields of Broken Hill and Silverton, which are almost on the border of the two colonies, are exclusively confined within the boundaries of New South Wales.

Up to the end of 1899 New South Wales had produced nearly 88 per cent. of the total value of silver raised in Australasia; Tasmania came second, with 6·1 per cent.; and the remaining small proportion was distributed over the other colonies, Victoria claiming the largest share. The total production of silver in Australasia in 1899, and up to the end of that year, was as follows:—

State.	During 1899.		To end of year 1899.	
	Value.	Proportion raised in each State.	Value.	Proportion raised in each State.
	£	per cent.	£	per cent.
New South Wales ...	2,070,657	82·3	27,882,997	87·8
Victoria	10,850	0·5	856,539	2·7
Queensland	15,671	0·6	713,089	2·2
South Australia	400	0·0	106,043	0·3
Western Australia ...	....	.....	250	0·0
Tasmania	377,788	15·0	1,925,578	6·1
Commonwealth..	2,475,366	98·4	31,484,496	99·1
New Zealand	40,838	1·6	276,669	0·9
Australasia	2,516,204	100·0	31,761,165	100·0

The world's production of silver during the ten years ended 1899 is estimated to have been as follows:—

Year.	Ounces.	Year.	Ounces.
1890	126,095,000	1895	182,220,000
1891	137,171,000	1896	176,707,000
1892	152,940,000	1897	182,081,000
1893	162,162,000	1898	179,252,000
1894	178,668,000	1899	174,723,000

The annual output of the colony of New South Wales alone is therefore rather more than one-fourteenth of the total production of silver.

Copper.

Copper is known to exist in all the colonies, and has been mined for extensively in South Australia, and on a much smaller scale in New South Wales, Tasmania, and Queensland. The low quotations which

have ruled for a number of years have had a depressing effect upon the industry, and for some time a few of the mines were closed; but with a consumption which has lately shown a tendency to overtake production, and the advanced price of the metal, copper-mining is again attracting considerable attention in Australasia. South Australia has so far supplied nearly 70 per cent. of the copper produced in these colonies; but Tasmania promises to become a formidable competitor in the output of this mineral. In Tasmania deposits were worked on a limited scale for a long number of years; but the discovery of a rich belt of copper-bearing country, extending from Mount Lyell past Mount Tyndall, Mount Read, Mount Murchison, and north of the Pieman to the Rocky and Savage Rivers, has completely changed the character of the mining industry in the colony, and from a small export of copper ore valued at £1,659 in 1896, the annual production since 1897 has become the largest in Australasia. This expansion was chiefly due to the enterprise shown by the Mount Lyell Mining and Railway Company, whose mine is situated at Gormanston, about 4 miles by road from Queenstown. At the latter place reduction works have been erected, where the ore is treated by the pyritic smelting process, ultimately being converted into blister copper, containing about 98 per cent. of metallic copper. From the reduction works a railway was laid down to Teapookana, on the King River, through most difficult country. This railway has since been extended from Teapookana to Strahan. It is stated that a sum of £400,000 was expended by the Company on construction and development works before any return was received from the mine; but by the end of September, 1899, the dividends had amounted to £436,262. The Company finds employment for 1,822 men, of whom 1,400 are employed at the reduction works, where, for the three years ended June, 1899, the quantity of ore smelted was 406,586 tons, yielding 13,119 tons of blister copper, which contained 12,961 tons of fine copper, 1,363,874 oz. of silver, and 57,467 oz. of gold. Other mines on the same field are at work, and in various parts of the colony copper-mining is receiving attention. In 1897 the value of the copper produced was £323,650. During the following year the production amounted to £382,640, and in 1899 it had increased to £1,227,532, or nearly four times the production of 1897. Of the total production of the Australasian colonies in 1896, the proportion of Tasmania was only 0·4 per cent.; in 1899, however, this colony furnished more than 59 per cent., and the increase is more striking when it is remembered that during the same period the annual output of each of the principal copper-producing colonies has been about doubled.

The discovery of copper had a marked effect upon the fortunes of South Australia at a time when the young and struggling colony was surrounded by difficulties. The first important mine, the Kapunda, was opened up in 1842. It is estimated that at one time 2,000 tons were produced annually, but the mine was closed in 1879. In 1845

the celebrated Burra Burra mine was discovered. This mine proved to be very rich, and paid £800,000 in dividends to the original owners. For a number of years, however, the mine has been suffered to remain idle, chiefly because the deposits originally worked were found to be depleted. For many years the average yield was from 10,000 to 13,000 tons of ore, yielding from 22 to 23 per cent. of copper. For the period of thirty years during which the mine was worked the output of ore amounted to 234,648 tons, equal to 51,622 tons of copper, valued at £4,749,224. Boring operations are being conducted at the mine for the purpose of determining whether payable ore exists at greater depths than those reached by the original workings. One bore was put down to a depth of 1,004 feet, and in the the opinion of the Government Geologist, the result was highly satisfactory, as it proved the continuance downwards of the copper-bearing ground sufficiently to warrant the reopening of a portion of the mine. For the purpose of further testing the ground a second site for boring has been selected. The Wallaroo and Moonta mines, discovered in 1860 and 1861, proved to be even more valuable than the Burra Burra. The Moonta mine employed at one time upwards of 1,600 hands, and still keeps 1,138 men at work. In 1890 these mines were amalgamated, and the estimated value of the copper produced to the end of 1898 is set down at £9,218,482, out of which about £7,000,000 have been expended in wages. About 1,800 miners are now employed. The total dividends paid by these mines is stated to be upwards of £1,700,000. The production of copper in South Australia during 1899 was valued at £406,208, the highest return since 1884, and nearly double that of 1894.

The copper-mining industry in New South Wales reached its highest point in 1883, when the production was valued at £472,982. The low price to which the metal fell greatly diminished the production, some of the principal mines being closed for a few years; but, as in the other colonies, there has lately been a revival in the industry. In 1899 the output was valued at £395,451, as compared with £272,686 for the previous year. The principal deposits of copper are found in the central part of the colony, between the Macquarie, Bogan, and Darling Rivers. Deposits have also been found in the New England and Southern districts, as well as at Broken Hill, showing that the mineral is widely distributed throughout the colony. The more important mines are those of Cobar, where the Great Cobar mine, which recommenced work on tribute early in 1894, raised in the following year 37,845 tons of ore, yielding 1,703 tons of smelted copper; in 1896, 66,431 tons of ore, yielding 2,650 tons of smelted copper, valued at £107,200; and, in 1897, 64,820 tons of ore, yielding 2,462 tons of smelted copper, valued at £108,306. Similar information for subsequent years is not available, but in the division of which the Great Cobar is the principal mine, 3,794 tons of refined copper, valued at £265,580, were obtained in 1899, as compared with 3,514 tons, valued at £178,900, won during 1898. It may be mentioned that the copper extracted from this mine is found to

contain gold more than sufficient to pay for mining and treating the ore. The syndicate to which the mines belong now gives employment to 700 men. In other portions of the Cobar district considerable activity is also being displayed. At Nymagee, copper to the value of £35,125 was produced during 1899, and in the Mount Hope division 2,174 tons of ore were raised, yielding copper valued at £10,498. In 1899, the Burraga Copper-mine was acquired by an English company, and great improvements and additions have been effected in the plant and machinery. During the year 10,256 tons of ore were treated, containing copper to the value of £36,400. About 300 men are employed at the mine.

Cupriferous deposits abound in Queensland, and at one time there was considerable speculation in copper-mining stock of that colony. Peak Downs and Mount Perry acquired great celebrity in the Australian mining market, but afterwards suffered reactionary depression, and were ultimately abandoned—the result, in a large measure, of over-speculation. It is, however, interesting to note that, after a period of twenty years' inactivity, the Peak Downs Copper-mines have been reopened, and it is also anticipated that other mines that have been closed for many years will be reopened. In Northern Queensland copper is found throughout the Cloncurry district, in the upper basin of the Star River, and the Herberton district. The returns from the copper-fields in the colony are at present small, owing to the lack of suitable fuel for smelting purposes, which renders the economic treatment of the ore difficult; and the development of the mines is greatly retarded by the want of easy and cheaper communication with the coast. The great distance from the coast is principally the cause of the stagnation that exists at Cloncurry, a district which is credited with an abundance of mineral wealth. Considerable activity has, however, been displayed in some of the districts. In the Walsh and Tinaroo Mineral Field, the Chillagoe Railway and Mining Co. is making preparations for mining on a very extensive scale. A railway is under construction to connect the mines with Cairns, and the company has leased over 3,000 acres for periods ranging from twenty-five to fifty years. At Rockhampton large quantities of ore have been opened up, and mining and smelting machinery valued at £7,000 is in course of erection. The total production of copper in Queensland during 1899 was valued at £9,498, as compared with £2,166 in 1898.

In Western Australia copper deposits have been worked for some years. Very rich lodes of the metal have been found in the Northampton, Murchison, and Champion Bay districts, and also in the country to the south of these districts, on the Irwin River. As in the other copper-producing provinces, there has been a revival of the industry in Western Australia. During 1899, the value of the production amounted to £35,938, as compared with £4,266 in 1898, and £1,033 for the previous year. The main portion of the copper was obtained from the West Pilbarra district. The most important workings

are at Whim Creek Mine, on the Balla Balla Creek, near Roeburne. The total export of copper to the end of 1899 was valued at £208,053. The number of men engaged in copper-mining during 1899 was 147.

Copper-mining has not attained any great proportions in Victoria, although deposits have been found in several parts of the colony, particularly in the Beechworth district, where they have been traced over an area of some 50 square miles. The value of the total production is estimated at £206,395, but there has not been any output during the last few years. The copper deposits of New Zealand have been worked to a small extent only, and for a number of years have been almost entirely neglected.

Copper is sometimes found in the Australasian mines in a virgin state, and beautiful specimens of the pure metal have been exhibited at different times, but it occurs generally in the form of oxidised copper ores, carbonates, sulphates, phosphates, and silicates of copper. The museums of South Australia, Victoria, and New South Wales contain striking samples of azurite and malachite, magnificent blocks of which have been shown from time to time at exhibitions, not only in the colonies, but also in Europe and America. Copper sulphides and arsenides are generally found in deep sinkings. The metal has also been found associated with tin in the form of stannine.

In 1899 the number of men employed in copper-mining in New South Wales was 2,369, as compared with 1,976 in 1898, 1,710 in 1897, and 810 in 1896. Only a few hands were employed in the other colonies, except South Australia, where the number must have amounted to about 4,000. In 1899 the industry afforded employment to a large number of men in Tasmania.

The total value of copper produced in Australasia during and up to the end of 1899, and the proportion furnished by each colony, are given below :—

State.	During 1899.		To end of year 1899.	
	Value.	Proportion raised in each State.	Value.	Proportion raised in each State.
	£	per cent.	£	per cent.
New South Wales	395,451	19·1	5,019,480	15·9
Victoria	.....	.....	206,395	0·6
Queensland	9,498	0·4	2,032,425	6·4
South Australia	406,208	19·6	21,935,954	69·6
Western Australia	35,938	1·7	208,053	0·7
Tasmania	1,227,532	59·2	2,102,048	6·7
Commonwealth	2,074,627	100·0	31,504,355	99·9
New Zealand	.....	.....	17,938	0·1
Australasia	2,074,627	100·0	31,522,293	100·0

In June, 1872, copper realised as much as £112 per ton, whilst in December, 1886, the lowest price on record until that time was touched, and only £44 could be obtained for South Australian copper. At the end of 1887 the price had risen to £70 per ton, and in September, 1888, to £93. In March, 1889, there was a great fall in the price of the metal, and in April of that year the quotation in London was as low as £43 per ton. This was the lowest price reached until June, 1894, when it fell to £41 10s. From that date there was an upward movement, as the following quotations will show. At the close of 1896 the London price of copper stood at £52 10s. per ton; in February, 1897, £54 10s. was reached; and at the 31st December, 1898, £60 was the market value. This price was further increased during 1899, and in September of that year no less than £77 per ton was quoted. Reference has already been made to the depressing influence exerted on the industry in Australasia by the low prices; but, as previously indicated, the tendency of consumption to increase in a greater ratio than production, and the rise in the price of the metal, has galvanised copper-mining into a state of activity which has not been witnessed for many years.

Tin.

Tin was known to exist in Australasia almost from the first years of colonisation, the earliest mention of the mineral appearing in a report of a discovery by Surgeon Bass on the north coast of Tasmania. In the form of cassiterite (oxide of tin) it occurs in all the colonies, but the richest deposits have been found in Tasmania—the Mount Bischoff being the most celebrated tin-mine in Australasia. The wealth of Queensland and the Northern Territory of South Australia in this mineral, according to the reports of Mr. Jack, a Government Geologist of the former colony, and the late Rev. Tenison Woods, appears to be very great.

In New South Wales lode tin occurs principally in the granite and stream tin under the basaltic country in the extreme north of the colony, at Tenterfield, Emmaville, Tingha, and in other districts of New England. The metal has also been discovered in the Barrier Ranges, at Poolamacca and Euriowie; near Bombala in the Monaro district; at Gundle, near Kempsey; at Jingellic, on the Upper Murray; at Dora Dora, on the Upper Murray; and in the Valley of the Lachlan; but in none of these districts has it been worked to any extent. Although the mineral was discovered by the Rev. W. B. Clarke as far back as the year 1853, the opening of the tin-fields of New South Wales only took place in the year 1872, but since that date the output from the mines has been considerable. In 1881 the industry attained its greatest height of prosperity, the export having increased to £568,795 from £249,779 in 1876. In 1882 the production was but £27,000 less; but

after that year, owing to protracted dry seasons, which in many cases prevented mining operations, combined with the comparatively low price which the metal brought, the value of the output fell considerably, and in 1898 only represented the small sum of £45,638. Another cause of diminished production is that the shallow deposits of stream-tin have to a great extent been exhausted, although the deep deposits and the tin-lodes have as yet scarcely been touched, nearly all the metal hitherto produced having been taken from alluvial deposits. The high price of the metal had a stimulating effect upon the industry during 1899, and the production of the year, valued at £90,482, was the highest since 1893. The principal leads worked were at the Vegetable Creek Tin-field, near Emmaville; at Tingha; at Deepwater; and at Elsmore, in the Inverell district. The only lode worked is the Ottery. The mine is situated at Tent Hill, in the Emmaville district, and was worked continuously throughout the year with very satisfactory results. The number of miners employed during 1899 was 1,489, of whom 418 were Chinese.

Tasmania has been the largest producer of tin in Australasia. As in New South Wales, a very large proportion of the tin hitherto produced has been from alluvial deposits, the lodes, except at the Mount Bischoff mine, having been comparatively neglected. There are considerable areas of alluvial tin ground in the eastern and north-eastern divisions of the colony, and a plentiful supply of water would result in a greatly increased production. Many claims remained unworked on account of the continuous dry weather; nevertheless, the value of the output during 1899, although not so high as in most of the early years of production, exceeded that of any year since 1889. The increase was mainly due to the high price of the metal. The Mount Bischoff mine, which is worked as an open quarry, is the largest producer of tin in the colony, and has paid £1,648,000 in dividends. The company has erected smelting works at Launceston, where most of the tin ore raised in the island is treated. In the Blue Tier district, where several companies have erected plant for working the low grade ores found there, the output is considered very satisfactory. Mining operations have also been resumed in the Ben Lomond district, and during the year crushing was commenced at the Rex Hill mine. The lodes in the vicinity of Mount Heemskirk have, till recently, been neglected, but the present satisfactory price of the metal has stimulated mining in this district, as well as in other parts of the colony, and, although the work done has been of a preparatory character, it is expected that tin ore will shortly be sent away in large quantities. About thirty men are employed on the various claims, and the machinery at the New West Cumberland mine has been thoroughly overhauled. Tin-dredging is also receiving considerable attention. Two companies have commenced operations on the Ringarooma River, with very encouraging results. Dredging claims have also been taken up along the foreshore at St. Helen's Point and George's Bay, and it is anticipated that the new

industry will have a large measure of success. In 1899 the number of tin-miners in the colony was 1,026, and the production was valued at £270,864.

The most important tin-mines in Queensland are in the Herberton district, south-west of Cairns; at Cooktown, on the Annan and Bloomfield Rivers; and at Stanthorpe, on the border of New South Wales. The Herberton is the chief tin-mining centre of Queensland, and the output of this district in 1899 was valued at £58,058. The tin in this district is chiefly obtained from lodes. Herberton and Stanthorpe have produced more than three-fourths of the total production of the colony. In the past few years the production greatly decreased in consequence of the low price of the metal; but with the rise in values, and more economic treatment of the ores, the industry naturally attracted more attention in 1899, when the yield was valued at £77,302, as compared with £36,502 in 1898, and £37,509 in 1897. During 1899 a considerable amount of work was carried out, in connection with the construction of roads, tramways, and reservoirs, and cutting and extending water races. With a continuance of the present satisfactory price the prospects of the industry are extremely encouraging.

The yield of tin in Victoria is very small, and until lately no fields of importance had been discovered, but towards the latter end of 1890 extensive deposits were reported to exist in the Gippsland district at Omeo and Tarwin. In 1899 only 156 tons of tin, valued at £11,200, were produced. In South Australia tin-mining is unimportant. During 1899 a small quantity, valued at £180, was exported from Port Darwin, in the Northern Territory. In Western Australia the tin-fields are situated at Greenbushes; but, until recently, the industry, owing to the low price, and the attraction exerted on capital by the gold-fields, has not been in a flourishing condition. The high price of the metal, however, has again turned attention to tin-mining, and during 1899 the output amounted to £25,270, as compared with £3,960, the average annual production of the three previous years. During the year, tin was discovered near Marble Bar, on the Pilbarra goldfield. A number of leases have been taken up, and there is every prospect of the find developing into a payable field. The industry gave employment to 698 miners during the year. There is no record of any production of tin in New Zealand.

The tin-mining industry has been subject to frequent fluctuations, especially of late years. The value of the metal in the European market was £159 per ton in 1872, £52 in 1878, £114 in 1880 and 1882, and £72 in 1884. A gradual recovery then took place, until in 1888 the price reached £121. During the ten years from 1888 to 1898, tin was subject to an almost continuous fall in price, realising in 1898 only one-half of that obtained a decade before. The metal, however, has now made a great advance in price, London quotations in December, 1899, being £125 10s. per ton, as compared with £82 in 1898, £63 in 1897,

and £59 10s. in 1896, and there has been a still further improvement during the year 1900.

The value of the production of tin during 1899, and up to the end of that year, was as given below :—

State.	During 1899.		To end of year 1899.	
	Value.	Proportion raised in each State.	Value.	Proportion raised in each State.
	£	per cent.	£	per cent.
New South Wales	90,482	19·0	6,382,538	34·3
Victoria	11,200	2·4	706,300	3·8
Queensland	77,302	16·3	4,526,102	24·3
South Australia	180	0·0	26,322	0·1
Western Australia	25,270	5·3	101,497	0·5
Tasmania	270,864	57·0	6,883,306	37·0
Australasia	475,298	100·0	18,626,065	100·0

The number of persons engaged in tin-mining in 1899 was as follows :—In New South Wales, 1,489 ; Tasmania, 1,026 ; Queensland, 913 ; Victoria, 15 ; and Western Australia, 698.

Iron.

Iron is distributed throughout Australasia, but for want of capital in developing the fields this industry has not progressed. In New South Wales there are, together with coal and limestone in unlimited supply, important deposits of rich iron-ores suitable for smelting purposes; and for the manufacture of steel of certain descriptions abundance of manganese, chrome, and tungsten ores are available. The most extensive fields are in the Mittagong, Wallerawang, and Rylstone districts, which are roughly estimated to contain in the aggregate 12,944,000 tons of ore, containing 5,853,000 tons of metallic iron.

Magnetite, or magnetic iron, the richest of all iron ores, is found in abundance near Wallerawang in New South Wales. The proximity of coal-beds now being worked should accelerate the development of the iron deposits, which contain 41 per cent. of metal. Magnetite occurs in great abundance in Western Australia, together with hematite, which would be of enormous value if cheap labour were abundant.

Goethite, limonite, and hematite are found in New South Wales, at the junction of the Hawkesbury sandstone formation and the Wianamatta shale near Nattai, and are enhanced in value by their proximity to coal-beds. Near Lithgow extensive deposits of limonite or clay-band ore are interbedded with coal. Siderite or spathic iron (carbonate of

iron) and vivianite (phosphate of iron) are found in New Zealand. The latter also occurs in New South Wales, intermingled with copper and tin ores.

The principal works in New South Wales for the manufacture of iron from the ore are situated at Eskbank, near Lithgow, where red siliceous ores, averaging 22 per cent., and brown hematite, yielding 50 per cent., metallic iron, have been successfully treated. Abundance of coal and limestone are found in the neighbourhood. This establishment, however, has for some time abandoned the manufacture of pig-iron, for which it was originally built. The work now carried on consists of the re-rolling of old rails, and the manufacture of iron bars, rods, and nails, and of ordinary castings. The quantity manufactured from scrap during 1899 was 6,500 tons, valued at £55,550. A successful attempt has been made at Mittagong to make gas-pipes, etc., from iron smelted from the ore and taken direct to the mould without first making it into pig-iron. Some years ago the iron smelting works at Fitzroy, Mittagong, were established, but after producing a considerable quantity of pig-iron the operations were discontinued. Some samples of ore, coal, and limestone obtained in this district, with pig-iron and castings manufactured therefrom, were exhibited at the late Mining Exhibition in London, and obtained a first award. Large quantities of iron ore have been raised from the deposits situated in the Marulan, Goulburn, Bredalbane, Mittagong, and Carcoar districts and despatched to the smelting-works at Dapto and Cockle Creek, where it has been used as flux, the gold contents of the ore helping to defray the extra cost of railway carriage. The new industry is giving employment to a large number of men. Parcels of iron oxide have also been sent from the Fitzroy and other ironstone deposits in the Mittagong district to the various gas-works of the Australasian colonies. The oxide is used in purifying the gas.

During the year 1900, the Government of New South Wales agreed to take 100,000 tons of steel rails, delivery to extend over a period of four years, from a large company which purposed erecting iron and steel works in the vicinity of Port Kembla, at a cost of between £500,000 and £750,000. The company has deposited £10,000 with the Treasury as a guarantee of good faith.

In Tasmania, where large deposits of pure red and brown hematite are known to exist, a commencement has been made in the production of iron ore. In 1896, 200 tons of ore, valued at £50, were raised; and in the following year 894 tons of iron ore, of a declared value of £812, were exported. The shipments in 1898 comprised 1,598 tons, valued at £1 per ton; and during 1899 the output increased to 3,532 tons, valued at £3,474. Very extensive iron deposits exist in the vicinity of the Blythe River, on the north-west coast, and a company has recently been formed to develop the mines thoroughly. It is intended to expend £30,000 in constructing a railway and other necessary

works. The Government of South Australia has offered a bonus of £2,000 for the first 500 tons of pig-iron produced in that colony. In Western Australia a limited demand for iron ore by the Smelting Company at Fremantle, resulted in 12,852 tons, valued at £8,939, being mined during 1899. This is the first year in which any record of the production of the mineral exists.

Sulphuretted iron ores (pyrites) are of little intrinsic value, but are frequently of considerable worth on account of the other minerals with which they are associated, common pyrites being often auriferous. Mispickel differs from other pyrites inasmuch as it contains arsenic, and sometimes gold and silver, and is frequently associated with tin and copper ores; but the extraction of gold is rendered difficult on account of the presence of the arsenic. These minerals (pyrites) are common to all the colonies.

Antimony.

Antimony is widely diffused throughout Australasia, and is sometimes found associated with gold. In New South Wales, deposits of antimony occur in various places, chiefly in the Armidale, Bathurst, and Rylstone districts; and at Bowraville on the North Coast. The principal centre of this industry is at Hillgrove, near Armidale, where the Eleanora Mine, one of the richest in the colony, is situated. The ore is also worked for gold. The results of a number of analyses, made by the authorities of the Geological Museum, show from 29·57 to 79·45 per cent. of metal; but, notwithstanding these encouraging assays, the price has not been sufficiently high to tempt Australian producers. A considerable quantity of antimony was raised some years ago at the Corangula mines, in the Macleay district, but these mines are at present idle. Lodes have also been opened and partly worked near Nambucca, Drake, Gulgong, and Razorback. The value of antimony raised during 1899 was £2,694, and up to the end of that year, £190,621. The industry has suffered greatly during the last five years from the low price of the metal, and the output is not likely to improve until the price takes an upward tendency.

In Victoria there has been a still greater falling off in the production of antimony; for from a state of activity in 1890 which gave employment to 238 miners, in 1899 the industry was absolutely at a standstill. In Queensland the fields were all showing development in 1891, when the output exhibited a very large increase compared with that of former years; but, as in the case of Victoria, the production of the metal seems to have ceased. In New Zealand also, the production of antimony has ceased since 1897, during which year only 10 tons, valued at £157, were exported from that colony. Good lodes of stibnite (sulphide of antimony) have been found near Roebourne, in Western Australia; but no attempt has yet been made to work them.

The following table shows the value of antimony produced in Australasia up to the end of 1899 :—

State.	Value.	Proportion raised in each State.
	£	per cent.
New South Wales	190,621	41·8
Victoria	177,174	38·9
Queensland	35,458	7·8
Commonwealth	403,253	88·5
New Zealand	52,361	11·5
Australasia	455,614	100·0

Bismuth.

Bismuth is known to exist in all the Australian colonies, but up to the present time it has been mined for in New South Wales, Queensland, South Australia, and Tasmania only. It is usually found in association with tin and other minerals, but in one instance a mass of native bismuth, weighing 30 lb., was found in New South Wales. The principal mine in the mother colony is situated at Kingsgate, in the New England district, where the mineral is generally associated with molybdenum and gold; this mine, however, is at present practically closed. The value of bismuth produced up to the end of 1899 in New South Wales and Queensland was £50,880 and £58,863 respectively. In the former colony the production in 1899 was valued at £3,355, while in Queensland the output in that year only amounted to £494. In Tasmania a company has been formed to work the bismuth deposits at Bell Mount. The lodes are opening up satisfactorily, and a small quantity of ore has been sent away.

Manganese.

Manganese probably exists in all the colonies, deposits having been found in New South Wales, Victoria, Queensland, New Zealand, and Western Australia—the richest specimens in New South Wales and New Zealand. Little, however, has been done to utilise the deposits, the demands of the colonial markets being extremely limited; but in the event of the extensive iron ores of New South Wales being worked on a large scale, the manganese, plentiful as it is in that colony, will become of commercial importance. The ore generally occurs in the form of oxides, manganite, and pyrolusite, and contains a high percentage of sesquioxide of manganese. The production of manganese in New Zealand

to the end of the year 1899 was valued at £59,644. In that colony the output has shrunk to insignificant proportions, being valued in 1899 at £407. In Queensland during the same year, 735 tons, valued at £2,831, were raised; but in New South Wales nothing was produced in the course of the twelve months.

Platinum.

Platinum and the allied compound metal Iridosmine have been found in New South Wales, but so far in inconsiderable quantities, the latter occurring commonly with gold or tin in alluvial drifts. Beach mining in the Ballina district, where platinum was associated with gold in considerable quantities is now a thing of the past. A special lease of abandoned ground at Macauley's Lead, Jerusalem Creek, has been applied for, and it is the intention of the applicants to try the ground by the cyanide process. Should this prove successful, the output of the metal will be largely increased, as an effort will be made to save any platinum met with in the concentrates. The metal has also been discovered at Fifield, in the Parkes district, and in lodes near Broken Hill and Orange. Mining operations were confined in 1899 to the Fifield gold-field, where the metal is found associated with the gold in washdirt. The total yield of platinum for the year was 638 oz., as compared with 1,250 oz. in 1898. Mining on this field is handicapped by a scarcity of water, and only half-time is put in at the claims. The Fifield platinum occurs in coarse shotty grains, and is much purer than that obtained from the northern beach-sands. The quantity of platinum produced during 1899 was valued at £1,070, and to the end of that year, £11,425. Platinum and Iridosmine have also been found in New Zealand.

Tellurium.

The noble metal Tellurium has been found in New Zealand, associated with gold and silver (petzite) and with silver only (hessite). It has also been discovered in New South Wales at Bingara and other parts of the northern districts, as well as at Tarana, on the Western Line, though at present only in such minute quantities as would not repay the cost of working; while at Captain's Flat it has been found in association with bismuth.

At many of the mines at Kalgoorlie, Western Australia, large quantities of ores of telluride of gold have been discovered in the lode formations.

Lead.

Lead is found in each of the Australasian colonies, but is worked only when associated with silver. In Western Australia the lead occurs in the form of sulphides and carbonates of great richness, but the quantity

of silver mixed with it is very small. The lodes are most frequently of great size, carrying huge masses of galena, and contain so little gangue that the ore can be very easily dressed to 83 or 84 per cent. The Government having offered £10,000 for the first 10,000 tons of lead smelted in the colony, works were erected to treat the ore, but the operations of the company were not successful, and the works were closed. Since 1845 Western Australia has exported 33,960 tons of lead ore, valued at £370,287. The chief mining centres for this mineral are in the Northampton district, between Geraldton and Murchison, but very little has been raised since 1890. As will be gathered from the remarks on silver, the association of lead with this metal in the Broken Hill mines of New South Wales adds very greatly to the value of the product. Up to the end of 1899 the quantity of lead in the ores raised is estimated to have been 523,179 tons.

Other Metals.

Mercury, in the form of sulphides or cinnabar, is found in New South Wales, Queensland, and New Zealand. In New South Wales, in the form of cinnabar, it has been discovered on the Cudgegong River, near Rylstone, and it also occurs at Bingara, Solferino, Yulgilbar, and Cooma. In the latter place the assays of ore yielded 22 per cent. of mercury. Very large and rich deposits have been found on Noggriga Creek, near Yulgilbar, and three 40-acre blocks have been taken up. Cinnabar leases have also been applied for in the Bingara district.

Titanium, of the varieties known as octahedrite and brookite, is found in alluvial deposits in New South Wales, in conjunction with diamonds.

Wolfram (tungstate of iron and manganese) occurs in some of the colonies, notably in New South Wales, Victoria, Queensland, and New Zealand. In Queensland, a temporary rise in the price of this mineral, owing to the depletion of stocks on the English market, so stimulated its production that the yield during 1899 was very much greater than in any former year, and amounted to 259 tons, valued at £10,060. To the end of 1899, 483 tons, of a value of £14,107, have been raised in the colony. Scheelite, another variety of tungsten, is also found in the last-mentioned colony. Molybdenum, in the form of molybdenite (sulphide of molybdenum), is found in New South Wales and Victoria, associated in the former colony with tin or bismuth in quartz-reefs.

Zinc ores, in the several varieties of carbonates, silicates, oxide, sulphide, and sulphate of zinc, have been found in several of the Australasian colonies, but have attracted little attention, except in New South Wales, where the metal is usually found associated with silver, lead, and copper; and various experiments are being made for the purpose of ascertaining whether it can be profitably extracted. During the last few years attention has been directed by the Broken Hill Proprietary

Company to the production of a high grade zinc concentrate from the sulphide ores, and it is anticipated that a fair proportion of the value contained will be realised, although the attempts so far to make a marketable zinc concentrate have only been partially successful. The value of the zinc produced during 1899 was £49,207, as compared with £28,941 in 1898, and £23,688 during 1897. The value of the total production to the end of 1899 was £112,879.

Nickel, so abundant in the island of New Caledonia, has up to the present been found in none of the Australasian colonies except Queensland and Tasmania; but few attempts have been made to prospect systematically for this valuable mineral. In 1894 Tasmania produced 136 tons of nickel ore, valued at £544; but nothing has been raised since that date.

Cobalt occurs in New South Wales and Victoria, and efforts have been made in the former colony to treat the ore, the metal having a high commercial value; but the market is small, and no attempt has yet been made to produce it on any large scale. The manganese ores of the Bathurst district of New South Wales often contain a small percentage of cobalt—sufficient, indeed, to warrant further attempts towards its extraction. The only deposits being worked at the present time are at Port Macquarie, where very promising ore has been opened up. During 1899, 190 tons, valued at £899, were exported.

Chrome iron or chrome ore has been found in New Zealand and Tasmania. In New South Wales chromium is found in the northern portion of the colony in the Clarence and Tamworth districts, and also near Gundagai. It is usually associated with serpentine. The chrome mining industry in the mother colony is of very recent date, although an attempt was made in 1882 to open up deposits at Bowling Alley Point, in the Peel River district; and in 1891 and 1895 in the Clarence River district. The first successful mining operations were carried out near Coolac, in the Gundagai district, 2,000 tons of ore being despatched in 1894 and 1895; and although numerous discoveries of chromite followed, the Gundagai–Tumut district has remained the only scene of profitable mining enterprise. The exports of chrome ore in 1894, 1895, and 1896 amounted to 3,034 tons, 4,299 tons, and 3,852 tons respectively; but the low price obtainable has prejudicially affected the industry, and although in 1897 the export still amounted to 3,379 tons, valued at £10,269, a considerable portion of this was raised in previous years. The production in 1898 decreased to 2,111 tons, valued at £6,301, but increased during 1899 to the considerable amount of 5,243 tons, valued at £17,416. The industry is still confined to the Gundagai district, where the ore abounds. The value of chrome iron ore won to the end of 1899 was £70,975. In New Zealand chrome ore to the value of £37,367 was extracted between 1858 and 1866, but there has been no further production since the latter year.

Sulphur exists in large quantities in the volcanic regions of New Zealand, where it will doubtless some day become an article of commerce.

It is also said to occur in small quantities at Mount Wingen, in the Upper Hunter district of New South Wales; at Tarcutta, near Wagga Wagga; and at Louisa Creek, near Mudgee.

Arsenic, in its well-known and beautiful forms, orpiment and realgar, is found in New South Wales and Victoria. It usually occurs in association with other minerals, in veins.

Coal.

The Australasian colonies have been bountifully supplied by Nature with mineral fuel. Five distinct varieties of black coal, of well characterised types, may be distinguished, and these, with the two extremes of brown coal or lignite, and anthracite, form a perfectly continuous series. For statistical purposes, however, they are all included under the generic name of "coal," and therefore these minerals will be considered here only under the three main heads—lignite, coal, and anthracite.

Brown coal or lignite occurs principally in the colonies of New Zealand and Victoria. Attempts have frequently been made to use the mineral for ordinary fuel purposes, but its inferior quality has prevented its general use. In Victoria, during 1898, 2,869 tons of brown coal were raised, valued at £767. There was no output during 1899. The fields of lignite in New Zealand are roughly estimated to contain about 500 million tons; and a small quantity is raised annually.

Black coal forms one of the principal mineral resources of New South Wales; and in New Zealand and other colonies the rich deposits of this valuable substance are rapidly being developed. That they will form an important source of commercial prosperity cannot be doubted, as the known areas of the coal-fields of this class have been roughly estimated to contain about 500 million tons of coal in New Zealand, and 78,198 million tons in New South Wales. New Zealand also possesses a superior quality of bituminous coal, which is found on the west coast of the Middle Island. An estimate of the probable contents of these coal-fields is given as 200 million tons. Coal of a very fair description was discovered in the basin of the Irwin River, in Western Australia, as far back as the year 1846. It has been ascertained from recent explorations that the area of carboniferous formation in that colony extends from the Irwin northwards to the Gascoyne River, about 300 miles distant, and probably all the way to the Kimberley district. The most important discovery of coal in the colony so far is that made in the bed of the Collie River, near Bunbury, to the south of Perth. The coal has been tested and found to be of good quality; and there are grounds for supposing that there are 250 million tons on this field. Mr. Jack, formerly Government Geologist of Queensland, gave it as his opinion that the extent of the coal-fields of that colony is practically unlimited, and that the carboniferous formations extend to a considerable distance under the Great Western Plains. It is roughly

estimated that the coal measures at present practically explored extend over an area of about 24,000 square miles. In Tasmania and Victoria large deposits of coal have also been found; and in all the colonies named the industry is being prosecuted with vigour.

Coal was first discovered in New South Wales in the year 1797, near Mount Keira, by a man named Clark, the supercargo of a vessel called the Sydney Cove which had been wrecked in Bass Straits. Later in the same year Lieutenant Shortland discovered the river Hunter, with the coal-beds situated at its mouth. Little or no use, however, was made of the discovery, and in 1826 the Australian Agricultural Company obtained a grant of 1,000,000 acres of land, together with the sole right, conferred upon them by charter, of working the coal-seams that were known to exist in the Hunter River district. Although the company held this valuable privilege for twenty years, very little enterprise was exhibited by them in the direction of winning coal, and it was not until the year 1847, when their monopoly ceased and public competition stepped in, that the coal-mining industry began to show signs of progress and prosperity. From the 40,732 tons extracted in 1847, the quantity raised had in 1891 expanded to the large figure of 4,037,929 tons, valued at £1,742,796. In 1892 the production fell to 3,780,968 tons, valued at £1,462,388; while in 1893 there was a further fall to 3,278,328 tons, valued at £1,171,722; but from 1894 to 1898 the production took an upward turn, till in the latter year it amounted to 4,706,251 tons, valued at £1,271,832. This output was the highest recorded, but owing to the steady fall in the price of coal, the value was much less than that of the smaller production of the years 1884–92. The output during 1899 amounted to 4,597,028 tons, valued at £1,325,799. Although the quantity extracted in 1899 was exceeded in 1898, the advance in prices has placed the value above that of every year since 1892. To the end of 1899, the total quantity of coal extracted from the New South Wales mines, from their opening in the early years of the century, amounted to 85,969,136 tons, valued at £35,647,004.

The coal-fields of New South Wales are situated in three distinct regions—the Northern, Southern, and Western districts. The first of these comprises chiefly the mines of the Hunter River districts; the second includes the Illawarra district and, generally, the coastal regions to the south of Sydney, together with Berrima, on the table-land; and the third consists of the mountainous regions on the Great Western Railway, and extends as far as Dubbo. The total area of the carboniferous strata of New South Wales is estimated at 23,950 square miles. The seams vary in thickness. One of the richest has been found at Greta, in the Hunter River district; it contains an average thickness of 41 feet of clean coal, and the quantity underlying each acre of ground has been computed to be 63,700 tons.

The number of coal-mines under inspection in New South Wales at the end of the year 1899 was 88, as compared with 91 in the previous

year. They gave employment to 10,339 persons, of whom 8,217 were employed under ground, and 2,122 above ground. The average quantity of coal extracted per miner was 559 tons, as against an average of 574 tons in the previous year, and 560 tons in 1897. For the ten years ended 1899, the average quantity of coal extracted per miner was 486 tons, which, at the mean price of coal at the pit's mouth, was equivalent to £159 11s. 7d. Taking all persons employed at the mines, both above and under ground, the average for the ten years would be 394 tons, equivalent to £129 7s. 5d. per man. This production is certainly large, and compares favourably with the results exhibited by the principal coal-raising countries of the world, as will be evident from the following figures, giving the averages for the leading countries, based on the number of persons employed :—

Country.	Quantity of coal raised per miner.	Value at the pit's mouth per ton.	Total value of coal raised per miner.
	tons.	s. d.	£ s. d.
New South Wales	394	6 7	129 7 5
Great Britain	286	6 2	90 15 6
United States	447	5 4	118 16 3
Germany	267	6 4	84 7 0
France	202	8 7	86 15 0
Belgium	173	8 0	69 4 6
Austria	203	5 6	56 4 9

New South Wales is its own chief customer. In 1899, out of a total production of 4,597,028 tons, the consumption amounted to 1,798,505 tons, or over 39 per cent. The colony of Victoria took the next largest share of the output, viz., 709,684 tons, or 25 per cent. of a total export of 2,798,523 tons. The quantity of coal required for local consumption shows a satisfactory increase during most years. The annual consumption per head increased from 16 cwt. in 1877 to 27 cwt. in 1899. The larger use of steam for railway locomotives and for manufacturing and other purposes, as well as the multiplication of gas-works, accounts for a great portion of the increase; but it must also be borne in mind that there is a large and growing demand for bunker coal for ocean-going steamers, which appears not as an export, but as required for home consumption. The amount of coal taken by the steamers during 1899 was about 375,000 tons.

The progress of the export trade of New South Wales, from 1881 to 1899, is shown in the following table:—

Exported to—	Quantity.			Value.		
	1881.	1891.	1899.	1881.	1891.	1899.
	tons.	tons.	tons.	£	£	£
Australasian colonies	657,135	1,510,976	1,624,137	255,572	755,509	553,629
India, Ceylon, and China	136,511	188,000	65,710	59,944	105,208	26,153
Mauritius	6,249	19,760	8,071	2,414	10,813	2,903
Pacific Islands	19,526	141,055	190,098	8,011	75,803	72,609
United States	150,002	365,623	189,962	68,172	200,851	72,774
South America	8,017	221,700	411,869	3,243	123,136	161,823
Other countries	52,404	67,254	308,676	20,174	35,310	115,903
Total	1,029,844	2,514,368	2,798,523	417,530	1,306,630	1,005,794

New Zealand is the only other colony in a position to export coal. Its export trade in 1881, 1891, and 1899 was as follows:—

Exported to—	Quantity.			Value.		
	1881.	1891.	1899.	1881.	1891.	1899.
	tons.	tons.	tons.	£	£	£
Australasian colonies	6,049	14,277	66,036	5,022	8,488	63,201
United Kingdom	.....	68,871	4,823	.....	76,027	4,638
Fiji and Norfolk Island	21	3,282	5,877	25	2,469	4,158
Pacific Islands, etc.	551	5,234	12,744	563	4,189	11,088
Total	6,621	91,664	89,480	5,610	91,173	83,085

The exports to the United Kingdom from New Zealand, as well as from New South Wales, consisted entirely of bunker coal for the steamers. Most of the coal-beds of the former colony are on the West coast of the South Island. The chief mines are at Westport, Greymouth, and Otago. The total quantity of coal produced in 1899 was 975,234 tons, of which the Coalbrookdale mines contributed 202,514 tons; the Millerton, 125,417 tons; the Kaitangata, 111,510 tons; and the Brunner, 96,511 tons. There is a steady increase in the quantity of coal raised in the colony, and a corresponding decrease in the importation. In 1899 there were 160 coal-mines in operation in New Zealand, giving employment to 2,153 men.

As showing the various kinds of coal found in New Zealand the following figures relating to the production in 1899 will be of interest:—

Bituminous coal	588,036	tons.
Pitch coal	37,835	,,
Brown coal	314,542	,,
Lignite	34,821	,,
Total	975,234	,,

Coal-mining is an established industry in Queensland, and is progressing satisfactorily. In 1899 the production showed an increase

of 86,000 tons over that of the previous year, and 1,142 men were employed in coal-mining in 1899. The mines, however, are situated too far from the coast to permit of serious competition with Newcastle in an export trade, and the output is practically restricted to supplying local requirements. New South Wales still exports on an average about 30,000 tons annually to Queensland. Of the total production of 494,009 tons in the northern colony in 1899, 373,655 tons were obtained in the Ipswich district, 111,414 tons at Wide Bay, and 8,940 tons in the Clermont district.

In Tasmania coal of good quality has been found in the lower measures of the permo-carboniferous rocks, principally in the basins of the Mersey and the Don in the north, and at Adventure Bay and Port Cygnet in the south, as well as in the upper measures of the triassic or jurassic rocks, which are extensively developed in the eastern and north-eastern parts of the colony. Mining is carried on in various districts in the island, but the principal mines are the Mount Nicholas and Cornwall in the Mount Nicholas Range, which contribute about 88 per cent. of the annual production. A small quantity of coal is produced at the Mersey and Dulverton Mines, and in 1898 work was resumed at the mines near Port Cygnet. A discovery has been reported from Swansea, on the East Coast, and during 1899 a seam of bituminous coal was found at Eden, on the West Coast. Tasmania still relies largely on New South Wales to supply coal for local requirements. Since 1896 the export of coal from New South Wales to Tasmania has increased from 57,000 tons to 86,000 tons. During 1899 there were 138 men engaged in coal-mining in the colony, and the output amounted to 43,113 tons, valued at £17,008.

Black coal has been discovered in Victoria, and is now being raised in increasingly large quantities. In 1899 the production amounted to 262,380 tons, valued at £113,522, as compared with 22,834 tons, valued at £19,731, in 1891. During this period the export from New South Wales to Victoria has fallen from 954,277 tons to 709,684 tons. The principal collieries in the colony are the Outtrim Howitt, from which 122,921 tons were obtained; followed by the Jumbunna, with 73,652 tons; and the Coal Creek Proprietary, with 56,843 tons. In South Australia, at Leigh's Creek, north of Port Augusta, coal-beds have been discovered. A company has been formed for the purpose of working the deposits, and small quantities have been raised during the last three years. The results of trials of this coal on the Government railways have, however, been unsatisfactory. Great activity is now being shown on the Collie coal-field in Western Australia. Boring operations having proved successful, a coal-mining district was constituted in February, 1896, and thrown open for selection in the following year, 22 square miles being immediately applied for. Satisfactory tests of Collie coal have been made, and it is now used extensively on the Government railways and on the gold-fields, and it has also been proved suitable for naval purposes, one great advantage being that it gives out little or no smoke,

The line of railway from Brunswick has now been completed, and contributed not a little to the satisfactory developments that took place during the year, the output having increased from 3,508 tons in 1898 to 54,336 in 1899, of which 49,427 tons were raised at the Wallsend colliery.

The quantity of coal extracted annually in Australasia now exceeds 6,426,000 tons, valued at about £2,146,000. The production of each colony during the year 1899 was as follows:—

State.	Quantity.	Value.	
		Total.	Proportion raised in each State.
	tons.	£	per cent.
New South Wales	4,597,028	1,325,799	61·8
Victoria	262,380	113,522	5·3
Queensland	494,009	175,715	8·2
Western Australia	54,336	25,951	1·2
Tasmania	43,113	17,008	0·8
Commonwealth	5,450,866	1,657,995	77·3
New Zealand	975,234	487,617	22·7
Australasia	6,426,100	2,145,612	100·0

The total quantity and value of the coal produced in the Australasian colonies up to the end of 1899 are shown below. A small quantity has been raised in South Australia, but is not yet of sufficient importance to warrant inclusion in the table:—

State.	Quantity.	Value.	
		Total.	Proportion raised in each State.
	tons.	£	per cent.
New South Wales	85,969,136	35,647,004	76·8
Victoria	1,526,968	793,568	1·7
Queensland	5,658,919	2,458,407	5·3
Western Australia	57,844	27,576	0·1
Tasmania	704,193	385,303	0·8
Commonwealth	93,917,060	39,311,858	84·7
New Zealand	13,458,880	7,099,615	15·3
Australasia	107,375,940	46,411,473	100·0

During the year 1899 this industry gave direct employment in and about the mines to the following numbers of persons in the several colonies :—

	No.
New South Wales	10,339
Victoria	880
Queensland	1,142
Western Australia	192
Tasmania	138
New Zealand	2,153

The average price of coal per ton varies in the colonies very considerably. In New South Wales, from the date of the commencement of mining to the end of the year 1899, the average price obtained has been 8s. 4d., but the mean of the last ten years has not been more than 6s. 7d. In 1899 the average price per ton of coal at the pit's mouth was as follows :—

	£	s.	d.
New South Wales	0	5	9
Victoria	0	8	8
Queensland	0	7	1
Western Australia	0	9	7
Tasmania	0	7	11
Commonwealth	0	6	1
New Zealand	0	10	0
Australasia	0	6	8

Anthracite is found on the island of Tasmania. It is a hard and heavy mineral, burning with difficulty, and possesses very little commercial value in countries where ordinary coal abounds. In Queensland an anthracite seam was recently discovered on the Dawson Coal Field, and observations show that the deposit is a very extensive one.

The following table shows the annual coal production of the principal countries of the world. The figures refer to the year 1898, except those for Great Britain, United States, and Australasia, which refer to the year 1899 :—

Country.	Tons of 2,240 lb.
Great Britain	220,094,780
United States	225,041,760
Germany	125,872,500
Austria-Hungary	37,210,950
France	31,836,100
Belgium	23,063,500
Canada	4,075,670
Australasia	6,426,100

Kerosene Shale.

Kerosene Shale (torbanite) is found in several parts of New South Wales. It is a species of cannel-coal, somewhat similar to the boghead mineral of Scotland, but yielding a much larger percentage of volatile hydro-carbon than the Scottish mineral. The richest quality yields about 100 to 130 gallons of crude oil per ton, or 17,000 to 18,000 cubic feet of gas, with an illuminating power of 35 to 40 sperm candles when gas only is extracted from the shale. The New South Wales Shale and Oil Company, at Hartley Vale, and the Australian Kerosene Oil and Mineral Company, at Joadja Creek and Katoomba, not only raise kerosene shale for export, but also manufacture from it petroleum oil and other products. From the year 1865, when the mines were first opened, to the end of 1899, the quantity of kerosene shale raised has amounted to 995,832 tons, worth £1,908,482. The average price realised during that period has been £1 18s. 4d. per ton. The prices ruling in 1899, when 36,719 tons were extracted, averaged £1 2s. 3d. per ton, representing a total value of £40,823 for the production of that year. The export of shale from New South Wales during 1897, 1898, and 1899 was as follows:—

Exported to—	1897.		1898.		1899.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	£	tons.	£	tons.	£
New Zealand	577	1,261	575	1,150	482	1,005
United Kingdom	7,203	14,479	361	725	547	1,100
Netherlands	5,829	11,000	4,802	9,000	2,440	5,700
Italy	3,764	7,600	5,538	11,000	3,890	7,950
United States	33	80	673	1,478	.....	.....
Brazil	2,100	5,000	.....	.....	.....	.....
Chili	1,367	3,000	1,555	3,110	1,538	3,076
Other countries	1,057	2,091	341	734	250	524
Total	21,930	44,511	13,845	27,197	9,147	19,355

Extensive formations of oil shale have been found in New Zealand, in Otago, and at Orepuki, in Southland. Attempts have been made to develop the oil resources of Waipaoa, but so far unsuccessfully. The oil produced does not possess the properties required in illuminating oils, although it is valuable for lubricating purposes.

The net import of kerosene into Australasia in 1899 is shown below :—

State.	Quantity.	Value
	gallons.	£
New South Wales	3,834,772	149,223
Victoria	3,147,005	100,945
Queensland	1,866,251	71,421
South Australia	1,333,403	40,024
Western Australia	1,231,890	37,128
Tasmania	281,235	9,779
Commonwealth	11,694,556	408,520
New Zealand	1,415,341	47,409
Australasia	13,109,897	455,929

Other Carbon Minerals.

Of all the mineral forms of carbon the diamond is the purest, but as it is usual to class this precious substance under the head of gems that custom will be followed in the present instance.

Graphite, or plumbago, which stands second to the diamond in point of purity, has been discovered in New Zealand, in the form of detached boulders of pure mineral. It also occurs in impure masses where it comes into contact with the coal measures. This mineral, up to the present time, has not been found in any of the other colonies except New South Wales, where in 1889 a lode 6 feet wide, but of inferior quality, was discovered near Undercliff, in the New England district; and in Western Australia, in which colony, however, owing principally to difficulties of transit, very little of it has been worked.

Ozokerite, or mineral wax, is reported to have been found at Coolah, in New South Wales.

Elaterite, mineral caoutchouc, or elastic bitumen, is said to have been discovered in New South Wales and South Australia. In the last-named colony a substance very similar to elaterite has been discovered in the Coorong Lagoons, and has received the name of coorongite. Up to the present time neither the extent of these finds nor their commercial value has been ascertained.

Bitumen is known to exist in Victoria, and is reported to have been found near the township of Coonabarabran, in New South Wales.

Kauri Gum, a resinous substance somewhat resembling amber in appearance, and like that product an exudation from trees, is found only in the Auckland province of New Zealand, where it is included under the head of minerals, although more logically entitled to be considered as a vegetable product. The best sort is dug out of the ground,

but considerable quantities of inferior grades are taken from the forks of standing trees. In New Zealand an extensive and lucrative commerce is carried on in kauri gum. It is computed that the total value of this product obtained from 1853 to the end of 1899 was £9,707,538. In the year 1899 the quantity obtained represented a value of £607,919, and gave employment to about 7,000 persons, both European and Maori. Kauri gum is included in the figures in this chapter giving the total mineral production.

Salts.

Common rock salt has been found in rock crevices in several parts of New South Wales, but it is not known to exist in large deposits so as to be of commercial importance. Natron is said to occur in the neighbourhood of the Namoi River, in the same colony. It appears as a deposit from the mud-wells of that region. Epsomite, or epsom salt, (sulphate of magnesia), is seen as an efflorescence in caves and overhanging rocks of the Hawkesbury sandstone formation, and is found in various parts of New South Wales.

Large deposits of alum occur close to the village of Bulladelah, 30 miles from Port Stephens, New South Wales. Up to the end of the year 1899, 10,681 tons of alunite had been raised there, most of which had been sent to England for treatment. It is said to yield well, and a quantity of the manufactured alum is sent to Sydney for local consumption. During 1899 the Bulladelah mine yielded 921 tons of stone, valued at £2,763.

Stones and Clays.

Marble is found in many parts of New South Wales, South Australia, New Zealand, and Tasmania. In New South Wales marble quarries have been opened in several districts, and some very fine specimens of the stone have been obtained.

Lithographic stone has been found in New Zealand, where another beautiful species of limestone known as Oamaru stone is also procured. This stone has a fine, smooth grain, and is of a beautiful creamy tint. It is in great demand for public buildings, not only in the colony where it is found, but in the great cities of continental Australia, which import large quantities of the stone for the embellishment of public edifices.

Limestone was at one time worked on the Myall Lakes, near Bungwall, New South Wales; and large quantities were forwarded from this district to Sydney, where the manufacture of hydraulic lime was commenced, but owing to the lack of a market the operations were discontinued.

Gypsum is found crystallised in clay-beds in New South Wales, and in isolated crystals in the Salt Lakes of South Australia, where a small proportion of sulphate of lime is present in the water. It is also found in portions of Victoria. This mineral is of commercial value for the

manufacture of cement and plaster of Paris, and also as a fertiliser. A company in South Australia has recently raised a considerable quantity for this latter purpose. It is found in the form of an insoluble salt in New South Wales, Victoria, and New Zealand.

Apatite, another mineral of considerable commercial importance, and very valuable as a manure, occurs in several districts of New South Wales, principally on the Lachlan River, at the head of the Abercrombie, and in the Clarence River district.

Quartz is of common occurrence in all parts of Australasia. Rock crystal, white, tinted, and smoky quartz are frequently met with, as well as varieties of crystalline quartz, such as amethyst, jasper, and agate, which possess some commercial value.

Tripoli, or rotten stone, an infusorial earth, consisting of hydrous silica, which has some value for commercial purposes, has been found in New South Wales, Victoria, and New Zealand. Meerschaum is reported to have been discovered near Tamworth and in the Richmond River district, in New South Wales.

Mica is also found in granitic country, chiefly in the New England and Barrier districts. In Western Australia very good mica has been found at Bindoon, and also on the Blackwood River, near Cape Leeuwin. In 1896 mica was being worked near Mingun, on the Upper Gascoyne; and a few years ago the Western Australian Government offered a bonus not exceeding £500 for the export of at least 2 tons of mica, to realise not less than 1s. 6d. per lb., within three months of the 28th March, 1898. Some promising discoveries have been made near Herberton, in Northern Queensland. In the Northern Territory of South Australia mica has been obtained on a small scale for a number of years. In 1895 the production was valued at £2,638; and in 1896, at £732.

Kaolin, fire-clays, and brick-clays are common to all the colonies. Except in the vicinity of cities and townships, however, little use has been made of the abundant deposits of clay. Kaolin, or porcelain clay, although capable of application to commercial purposes, has not as yet been utilised to any extent, though found in several places in New South Wales and in Western Australia.

Asbestos has been found in New South Wales in the Gundagai, Bathurst, and Broken Hill districts—in the last-mentioned district in considerable quantities. Several specimens of very fair quality have also been met with in Western Australia; and the Government of the colony offered a bonus not exceeding £500 for the export of 50 tons of asbestos, of a value of not less than £10 per ton. In the colony of Tasmania, in the vicinity of Beaconsfield, asbestos is known to exist in considerable quantities.

Gems and Gemstones.

Many descriptions of gems and gemstones have been discovered in various parts of the Australasian colonies, but systematic search has been made principally for the diamond and the noble opal.

Diamonds are found in New South Wales, Victoria, Queensland, and South Australia, but only in the first-named colony have any attempts been made to work the diamond drifts. The existence of diamonds and other gem-stones in the territory of New South Wales had been known for years before an attempt was made to work the deposits in 1872. In the course of the following year several deposits of adamantiferous wash were discovered at Bingara, in the New England district. The number of diamonds found in the colony to the end of 1899 is estimated at 90,275, the largest being one of $5\frac{5}{8}$ carats, or 16·2 grains; but great difficulty has been experienced in obtaining exact statistics of the production, and it is believed that the output is considerably understated. The diamonds occur in old tertiary river drifts, and in the more recent drifts derived from them. The deposits, which occur in the Inverell, Bingara, Mittagong, Cudgegong, and Narrabri districts, are extensive, and have not yet been thoroughly prospected. The best of the New South Wales diamonds are harder and much whiter than the South African diamonds, and are classified as on a par with the best Brazilian gems. During the year 1889 the Malacca Company, near Tingha, found diamonds weighing $2,195\frac{5}{8}$ carats, valued at £878 5s. In 1891, 1,200 carats of diamonds were won in the Tingha and Inverell districts, valued at £1,050. In 1892 as many as 2,250 diamonds were obtained from the Monte Christo Mine at Bingara alone. The majority of diamonds obtained in this district weigh from $\frac{1}{6}$ to $\frac{1}{5}$ carat, while the largest vary from 2 to 3 carats. The total output of the Bingara district to the end of 1893 is said to have been about 15,000 carats, valued at £15,375. In 1894 the only work done was prospecting in the Bingara, Mittagong, and Denison Town districts; and in 1895 the industry was still quiet, but at Boggy Camp Diamond Field, 16 miles west of Tingha, a revival took place during the year, and 4,100 stones, weighing in the aggregate 1,313 carats, and valued at £492, were obtained. No estimate of the returns in 1896 were obtained from this field, but the output of gems in 1897 was 8,489 carats, valued at about £3,000. In 1898 14,920 carats were won, valued at £5,625, the gems being associated with tin in considerable quantities. During that year a quantity of new machinery was erected, and the field was considerably developed, although work was greatly hampered through the scarcity of water. The output from the Bingara diamond-field for 1898 was set down at 1,573 carats, valued at £434; in 1899, a good deal of interest was manifested in the industry, but the scarcity of water during a portion of the year restricted operations on this field to work of an exploratory character. The yield for the year, the majority of which was derived from the Boggy Camp field, is estimated at 25,874 carats, valued at £10,350.

The finest opal known is obtained in the Upper Cretaceous formation at White Cliffs, near Wilcannia, New South Wales, and there are about 750 miners on the field. During the year 1895 good stone was found at a depth of 50 feet, and as the lower levels are reached the patches of opal

appear to improve in quality and to become more regular and frequent. On block 7 a patch of stone was found which realised over £3,000. It is difficult to state with exactitude the value of the production, but it is believed that stone to the value of £23,000 was sold during the three years ended 1895, while the industry has made such great strides during the last four years that in 1896 the production is estimated at £45,000; in 1897, at £75,000; in 1898, at £80,000, and in 1899, at £135,000. The quality of the stone found on the fields varies considerably, some only realising 10s. per oz., whilst the best quality occasionally realises as much as £42 per oz. The best market for the gems is Germany, where they find a ready sale; but it is stated that the principal gem merchants of Europe have now agents on the field for the purchase of the stone.

In Queensland the opal is found in the Cretaceous areas in the far west and south-west, from a few feet to 40 feet below the surface, and its extraction affords employment to a large number of men, who, however, in the majority of cases only follow the industry in the time spared from other occupations. It is difficult to accurately estimate the production from the opal fields of the colony, but in 1899 it was set down at £9,000. Valuable opal has been discovered at Tairua, in the Hauraki district of the North Island of New Zealand; and also in the Mount Peel and Auckland districts, in Canterbury. There is, however, no record of any production during the last few years.

Other gem-stones, including the sapphire, emerald, oriental emerald, ruby, opal, amethyst, garnet, chrysolite, topaz, cairngorm, onyx, zircon, etc., have been found in the gold and tin-bearing drifts and river gravels in numerous localities throughout the colonies. The Emerald Proprietary Company, in the Emmaville district, in the Glen Innes district, New South Wales, have sunk two shafts, 100 feet and 50 feet respectively; and 25,000 carats have been won in a rough state. Their value when cut and finished, if of the best quality, is about £2 per carat. Owing to the difficulties of extraction, and the low price of the gems in the London market, the mines were closed for three years. In 1897 they were again opened up, and, although worked for some time during 1898, they are now closed, the company having obtained a suspension of the labour conditions. No gems were produced during the year.

The sapphire is found in all the colonies, but most abundantly in the neighbourhood of Beechworth, Victoria. The oriental topaz has been found in New South Wales. Oriental amethysts also have been found in that colony; and the ruby has been found in Queensland, as well as in New South Wales.

According to an authority on the subject of gemstones, rubies, oriental amethysts, emeralds, and topaz have been chiefly obtained from alluvial deposits, but have rarely been met with in a matrix from which it would pay to extract them.

Turquoises have been found near Wangaratta, in Victoria, and mining for these gems is being carried on in the locality.

Chrysoberyls have been found in New South Wales; spinel rubies, in New South Wales and Victoria; white topaz, in all the colonies; and yellow topaz, in Tasmania. Chalcedony, carnelian, onyx, and cat's-eye are found in New South Wales; and it is probable that they are also to be met with in the other colonies, particularly in Queensland. Zircon, tourmaline, garnet, and other gemstones of little commercial value are found throughout Australasia.

In South Australia some very fine specimens of garnet were found, causing some excitement at the time, as the gems were mistaken for rubies. The stones were submitted to the examination of experts whose reports disclosed the true nature of the gems, and dispelled the hopes of those who had invested in the supposed ruby-mines of South Australia.

Production of Minerals.

The foregoing pages show that Australasia possesses invaluable mineral resources, and although enormous quantities of minerals of all kinds have been won since their first discovery, yet the deposits, with the exception perhaps of gold, have only reached the first period of their exploitation. Vast beds of silver, tin, and copper ore, and of coal are known to exist, but their development has not reached a sufficiently advanced stage to enable an exact opinion to be expressed regarding their commercial value, though it is confidently held by mining experts that this must be enormous. The mineral production of the various colonies in 1899 will be found below :—

State.	Total Value.	Proportion of each State.	Average value per head.
	£	per cent.	£ s. d.
New South Wales	6,080,516	24·5	4 10 5
Victoria	3,579,322	14·4	3 1 7
Queensland	3,139,620	12·6	6 11 8
South Australia	516,479	2·1	1 8 1
Western Australia	6,346,581	25·5	37 8 6
Tasmania	2,538,737	10·2	14 2 6
Commonwealth	22,201,255	89·3	6 0 0
New Zealand	2,656,554	10·7	3 10 10
Australasia	24,857,809	100·0	5 11 8

The total value of minerals raised in 1899 exceeded by £12,951,164 the average annual amount since 1852. The search for gold has led to the expansion of the mining industry in other directions, and, although seekers of gold have become fewer, the number of miners engaged in the extraction of other minerals has largely increased, and it is a question

whether the total number of persons who gain their livelihood by mining pursuits at the present time is not equal to the number so engaged when gold and coal alone were the elements of the mineral production of the Australasian colonies. The resources known to exist and to be developed in these colonies are likely to maintain for many generations to come a large and prosperous mining population.

The following table shows the value of the mineral production of each colony during the four years 1871, 1881, 1891 and 1899, as well as the value per inhabitant for the whole of Australasia :—

State.	1871.	1881.	1891.	1899.
	£	£	£	
New South Wales	1,650,000	2,121,000	6,396,000	6,081,000
Victoria	5,400,000	3,467,000	2,339,000	3,579,000
Queensland	806,000	3,165,000	2,300,000	3,140,000
South Australia	725,000	421,000	366,000	516,000
Western Australia	5,000	11,000	130,000	6,346,000
Tasmania	25,000	604,000	516,000	2,539,000
Commonwealth	8,611,000	9,789,000	12,047,000	22,201,000
New Zealand	3,100,000	1,528,000	1,841,000	2,657,000
Australasia — Total	11,711,000	11,317,000	13,888,000	24,858,000
Australasia — Per head	£ s. d. 6 1 0	£ s. d. 4 1 6	£ s. d. 3 12 3	£ s. d. 5 11 8

The foregoing table shows that the mineral production of 1899 was nearly eleven millions more than that of 1891. There were increases in all the colonies with the exception of New South Wales, in which colony a decrease of slightly over £300,000 has to be recorded, chiefly owing to the fall in the value of silver, and, to a less extent, to the decline in the price of coal. The most notable increases were in Western Australia and Tasmania ; the production of the former colony exceeded that of 1891 by over £6,200,000, mainly on account of the great increase in the gold yield, which advanced in value from £115,182 to £6,246,733 during the period under review. The large increase in the Tasmanian production was due to the output of the Mount Lyell Copper-mines. In the other colonies, the increases were also substantial, ranging from 36 per cent. in South Australia to 53 per cent. in Victoria.

Comparing the value of the mineral production in 1899 with the population, the largest share is taken by Western Australia, with £37 8s. 6d. per inhabitant; Tasmania ranks second, with £14 2s. 6d. per inhabitant ; Queensland third, with £6 11s. 8d. ; New South Wales fourth, with £4 10s. 5d. ; and New Zealand fifth, with £3 10s. 10d. Victoria follows with an average of £3 1s. 7d. per head, and in South Australia the production per inhabitant was only £1 8s. 1d. The

average per inhabitant for Australasia was £5 11s. 8d., and, excluding New Zealand, the average for the States constituting the Commonwealth was £6 per head.

The following table shows the value of production in each of the colonies during 1899, distinguishing the principal minerals. With regard to some of the colonies the data are defective in respect to "other minerals," but not to such an extent as to seriously affect the gross total. The column "other minerals" includes kerosene shale in New South Wales and kauri gum in New Zealand :—

State.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	1,751,815	2,070,657	395,451	90,482	1,325 799	446,312	6,080,516
Victoria	3,418,000	10,850	.....	11,200	113,522	25,750	3,579,322
Queensland	2,838,119	15,671	9,498	77,302	175,715	23,315	3,139,620
South Australia	79,041	400	406,208	180	.....	30,650	516,479
Western Australia....	6,246,733	.....	35,938	25,270	25,951	12,689	6,346,581
Tasmania	327,545	377,788	1,227,532	270,864	17,008	318,000	2,538,737
Commonwealth ..	14,661,253	2,475,366	2,074,627	475,298	1,657,995	856,716	22,201,255
New Zealand	1,513,173	40,838	.....	.....	487,617	*614,926	2,656,554
Australasia	16,174,426	2,516,204	2,074,627	475,298	2,145,612	1,471,642	24,857,809

* Inclusive of kauri gum of the value of £607,919.

The total mineral production to the end of 1899 is shown in the following table, in which the column "other minerals" again includes kerosene shale and kauri gum :—

State.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	47,546,013	27,882,997	5,019,480	6,382,538	35,647,004	3,455,913	125,933,945
Victoria	254,156,820	856,539	206,395	706,300	793,568	243,994	256,963,616
Queensland	47,338,074	713,089	2,032,425	4,526,102	2,458,407	262,811	57,330,908
South Australia.....	2,212,787	106,043	21,935,954	26,322	.....	460,931	24,742,037
Western Australia....	16,906,449	250	208,053	101,497	27,576	382,633	17,626,458
Tasmania	4,282,192	1,925,578	2,102,048	6,883,306	385,303	328,777	15,907,204
Commonwealth ..	372,442,335	31,484,496	31,504,355	18,626,065	39,311,858	5,135,059	498,504,168
New Zealand	55,966,498	276,669	17,938	.....	7,099,615	*9,934,023	73,294,743
Australasia	428,408,833	31,761,165	31,522,293	18,626,065	46,411,473	15,069,082	571,798,911

* Inclusive of kauri gum of the value of £9,707,538.

Coal was the only mineral raised in New South Wales prior to 1852, and its production up to that date was valued at £279,923. Deducting that amount from the total value of Australasian minerals raised up to the end of 1899, the remainder, £571,518,988, represents the value of mineral production from 1852, equal to an average of £11,906,645 per annum for the forty-eight years.

EMPLOYMENT AND PRODUCTION.

TO obtain a fair approximation of the number of persons engaged in the various walks of life in Australasia was impossible before the census of 1891 was taken, for although at the Census enumerations of 1881 and previous years the occupations of the people were made a feature of the inquiry, the classification, which followed closely that originally devised by the late Dr. Farr, was unsatisfactory, as it completely failed to distinguish between producers and distributors. To avoid a repetition of this defect the Census Conference, held at Hobart in March, 1890, abandoned the English system and adopted a scheme of classification more in accordance with sound principles. This classification was reviewed at the conference of Statisticians held in Sydney in February, 1900, and was adopted, with very slight modification, for use at the decennial Census of 1901. Under this classification the population is divided into two great sections—bread-winners and dependents ; and the bread-winners are arranged in their natural classes of producers and distributors, with their various orders and sub-orders. The classes may be shortly defined as follow :—

Section A.—Breadwinners.

Class 1. Professional.

Class 2. Domestic.

Class 3. Commercial.

Class 4. Transport and Communication.

Class 5. Industrial.

Class 6. Agricultural, Pastoral, Mineral, and other Primary Producers.

Class 7. Indefinite.

Section B.—Dependents : Non-Breadwinners.

Class 8. Dependents.

A tabulation of the occupations of the people of these colonies in 1891 according to the foregoing classification would hardly be of value at the present time, especially as another census will have been taken before this volume is twelve months old ; but a proportional division of

the population into breadwinners and dependents as at the census of 1891 may have some interest, and is therefore given hereunder :—

State.	Proportion of Breadwinners.		Proportion of Dependents.	
	Males.	Females.	Males.	Females.
	per cent.	per cent.	per cent.	per cent.
New South Wales ...	63·13	17·36	36·87	82·64
Victoria	65·42	21·15	34·58	78·85
Queensland	65·84	18·66	34·16	81·34
South Australia	62·42	15·97	37·58	84·03
Western Australia ...	72·47	15·28	27·53	84·72
Tasmania	63·04	18·15	36·96	81·85
New Zealand.....	62·11	14·86	37·89	85·14
Australasia.....	64·01	18·12	35·99	81·88

If a comparison of the proportion of breadwinners be made with the proportion of males of supporting ages given in the table on page 256 of this volume, it will be seen that Western Australia, with the highest proportion of supporting males, viz., 67·60 per cent., naturally supplied the highest proportion of breadwinners, the leading position occupied by this colony being sufficiently accounted for by the pioneer stage of its existence ; Queensland came second, with 65·22 per cent. of males of supporting ages, and 65·84 per cent. of breadwinners ; Victoria third, with 62·68 per cent., and 65·42 per cent. respectively ; and New South Wales fourth, with 61·41 per cent. of males of supporting ages, and 63·13 per cent. of breadwinners. Tasmania, South Australia, and New Zealand, with the lowest proportions of supporting ages, had also the lowest proportions of breadwinners.

In all the colonies the male breadwinners were in excess of the males of the so-called supporting ages. This fact was, of course, due to the employment of boys under 15, and the continued activity of men over 65 years of age. The excess was greatest in Tasmania, where the largest proportion of males of the old ages was to be found. Queensland, where the excess was smallest, viz., to the extent of only 0·62 per cent., had the lowest proportion of males of the old ages, and, except Western Australia, the lowest proportion of children of dependent ages.

Information concerning the great primary industries of the different colonies has already been given in the chapters of this volume dealing with agriculture, grazing, dairying, and mining. The manufacturing industries remain to be dealt with.

MANUFACTORIES.

The progress of the manufacturing industry in Australasia has been slow and fitful, even in the most advanced colonies; and although the tabular statement given below shows an increase of 76,340 hands since 1885, about one-tenth of this number has been added by a change in the tabulation of the statistics in Victoria and New South Wales. The population of the continent is not sufficient to maintain industries on anything like an extensive scale, and even the Australasian field, such as it is, has been still further limited by the intercolonial tariffs.

The greater portion of the manufactories of Australasia may be classified as domestic industries—that is to say, industries naturally arising from the circumstances of the population, or connected with the treatment of perishable products; but there are nevertheless a fair number of industries of a more complex character which have been firmly established. A statement of the number of establishments and of the hands employed in Australasia is given below for the years 1885, 1890, 1896, and 1899. In some of the colonies the manufacturing statistics are incomplete, and it has therefore been necessary to estimate the figures in several cases:—

Year.	Establishments.	Hands employed.
	No.	No.
1885	10,578	127,360
1890	11,157	158,780
1896	11,055	164,840
1899	12,290	201,100

MANUFACTORIES OF VICTORIA.

Victoria was the colony which first displayed activity in the manufacturing industries. In 1885 there were employed in factories, properly so called, 49,297 hands, and in 1889 there were 57,432 hands; but the number fell away to 39,473 in 1893. Since that year there has been an increase, shown in the following table as 20,597, but in reality not quite so great in consequence of an extension in the scope of the returns. Of the 60,070 workers employed in 1899, 4,184 may be said

to have found occupation in connection with domestic industries for the treatment of perishable produce for immediate use ; 21,425 in other industries dependent upon the natural resources of the country, and 34,461 in industries the production from which comes into competition with imported goods :—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1885	2,813	41,542	7,755	49,297
1886	2,770	39,453	6,320	45,773
1887	2,854	42,019	7,065	49,084
1888	2,975	47,335	7,153	54,488
1889	3,137	49,105	8,327	57,432
1890	3,104	47,596	8,773	56,369
1891	3,141	43,905	8,320	52,225
1892	2,952	35,966	7,226	43,192
1893	2,677	32,410	7,063	39,473
1894	2,632	32,776	8,224	41,000
1895	2,804	35,467	10,628	46,095
1896	2,810	37,779	12,669	50,448
1897	2,760	38,671	14,030	52,701
1898	2,869	40,631	14,147	54,778
1899	3,027	44,041	16,029	60,070

Compared with the other colonies, the proportion of factory hands who are women is largest in Victoria ; thus, out of 57,432 hands in 1889 there were 8,327, or 14·50 per cent., females; while in 1899, of 60,070 hands, 16,029, or 26·7 per cent., were females.

The number of factories and industrial establishments of various sizes, with the number of hands employed in each class during 1899, was as follows :—

Number of Hands employed by each Establishment.	Number of Establishments.	Total number of Hands.
Under 4 hands	494	1,594
4 hands	301	1,204
5 to 10 hands	1,073	7,573
11 to 20 ,,	551	8,035
21 to 50 ,,	365	11,354
51 to 100 ,,	149	10,345
101 hands and upwards	94	19,965
Total	3,027	60,070

Manufactories of New South Wales.

The manufacturing industries of New South Wales do not cover so wide a field as those of Victoria, nor do they afford employment for so many persons. For the year 1899 the two colonies compare as follows :—

State.	Establishments.	Hands employed.		Total.
		Males.	Females.	
Victoria	3,027	44,041	16,029	60,070
New South Wales ...	2,912	47,063	8,583	55,646

In Victoria, therefore, there were employed 7,446 females more than in New South Wales, and 3,022 fewer males. In New South Wales the year 1891 showed a total of 46,135 hands, viz., 41,582 males and 4,553 females; but these figures had declined in 1893 to 36,412 males and 2,506 females, or a total of 38,918. However, that was the lowest point reached in the manufacturing returns of the colony, for thenceforth there was an improvement every year until 1899, when, as will be seen from the appended statement, the hands numbered 55,646. But in 1896, it must be explained, a change was made in the scope of the returns, and this accounted for an addition of 4,899 to the total number of workers. The actual increase in the course of the six years was, therefore, about 11,800 hands :—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1885	3,419	36,390	2,404	38,794
1886	3,541	38,257	3,420	41,677
1887	3,541	40,160	3,367	43,527
1888	3,349	39,365	3,686	43,051
1889	3,106	41,299	4,265	45,564
1890	2,926	40,725	4,264	44,989
1891	2,583	41,582	4,553	46,135
1892	2,246	41,298	2,970	44,268
1893	2,052	36,412	2,506	38,918
1894	2,595	39,529	3,222	42,751
1895	2,302	39,987	3,846	43,833
1896	2,928	42,908	6,932	49,840
1897	2,826	44,333	7,106	51,439
1898	2,839	44,673	7,845	52,518
1899	2,912	47,063	8,583	55,646

Of the 55,646 workers employed in 1899, 22,522 found employment in connection with industries the products from which come into competition with imported goods—3,633 were engaged in domestic industries for the treatment of perishable produce required for immediate use, and 29,491 in other industries called into existence by the natural resources of the colony.

The number of factories and industrial establishments of various sizes, with the number of hands employed in each class during 1899, was as follows :—

Number of Hands employed by each Establishment.	Number of Establishments.	Total number of Hands.
Under 4 hands	396	1,381
4 hands	352	1,408
5 to 10 hands	1,080	7,723
11 to 20 ,,	529	7,775
21 to 50 ,,	352	10,864
51 to 100 ,,	118	8,093
101 hands and upwards	85	18,402
Total	2,912	55,646

Manufactories of Other Colonies.

In Queensland systematic statistics relating to manufactories have only been taken since 1892. The figures for the last eight years are as follow :—

Year.	Establishments.	Total Hands employed.
1892	1,329	13,369
1893	1,391	14,434
1894	1,323	15,224
1895	1,397	18,728
1896	1,332	19,733
1897	1,682	22,160
1898	1,864	24,170
1899	2,172	27,200

In South Australia returns were obtained from manufactures in 1892, but in the following three years no information was obtained; since 1895, however, the returns have been collected annually. The following are the available figures:—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1892	815	9,642	1,847	11,489
1896	767	10,974	1,811	12,785
1897	768	10,930	2,027	12,957
1898	766	12,296	2,085	14,381
1899	841	12,941	2,214	15,155

In Western Australia, the manufacturing industry has advanced very rapidly in importance, and as regards the number of hands employed is now almost on a par with South Australia. The following are the figures for the last three years:—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1897	413	8,683	408	9,091
1898	485	8,521	613	9,134
1899	476	8,641	766	9,407

Tasmania has several long-established industries, but the employment afforded has been very limited. The opening up of the mines in the west coast of the island promises to have an important effect upon the local industries, the beginnings of which are even now visible. Commencing with 1886, when the returns relating to manufactories were first collected, the number of establishments and of hands employed therein were as follows:—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1886	271	2,030	77	2,107
1887	249	1,968	74	2,042
1888	250	2,015	50	2,065
1889	232	2,144	35	2,179
1890	237	2,147	57	2,204
1891	215	2,019	33	2,052
1892	205	1,641	52	1,693
1893	204	1,407	20	1,427
1894	201	1,546	34	1,580
1895	211	1,713	41	1,754
1896	215	2,110	34	2,144
1897	290	3,272	206	3,478
1898	288	3,438	191	3,629

In New Zealand information regarding the manufacturing industry is obtained only at the quinquennial census. In 1886 there were 1,946 establishments, employing 22,095 persons; in 1891 the establishments numbered 2,254, and the hands 25,633; and in 1896 there were 2,440 establishments, employing 27,336 persons.

Classes of Industry.

The information in regard to industrial establishments is not given by the various statistical departments in precisely the same form, and any summary of the various industries must be looked upon as more or less approximate. The following classification follows the lines adopted in several of the colonies :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	1899.	1899.	1899.	1899.	1899.	1898.	1896.
	No.	No.	No.	No.	No.	No.	No.
Treating raw material, the product of pastoral pursuits.	2,690	1,942	1,502	400	22	133	1,755
Connected with food and drink, or the preparation thereof...	9,356	9,557	9,023	1,990	1,008	641	5,176
Clothing and textile fabrics ..	10,984	17,728	3,795	2,927	1,147	473	6,790
Building materials	6,277	5,131	3,214	1,198	3,617	987	4,674
Metal works, machinery, &c..	11,901	9,423	4,013	5,629	1,745	316	2,623
Ship-building, repairing, &c..	1,499	168	183	81	27	....	281
Furniture, bedding, &c.....	1,701	1,446	576	32	160	....	576
Books, paper, printing, &c. ..	5,054	5,168	2,108	989	782	547	2,521
Vehicles, saddlery, and harness	1,950	2,312	1,445	541	406	300	1,077
Light, fuel, and heat	987	895	307	65	140	40	420
Miscellaneous	3,247	6,300	1,034	1,303	353	192	1,443
Total.....	55,646	60,070	27,200	15,155	9,407	3,629	27,336

The information in regard to Tasmania is manifestly incomplete, as it is not to be supposed there are no persons employed in the two groups of industries opposite which no figures appear; the Tasmanian returns appear to be confined to certain leading employments, and if the minor industries had been included it is probable the gross number

of hands employed would have shown a total of 6,000. However, in the absence of complete returns, the published figures only can be dealt with. Turning now to the details of the various classes of industry, interesting features are disclosed. The hands employed in the industries treating raw material, the product of pastoral pursuits, arranged according to the principal groups, were as follow :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Boiling-down and Tallow Refineries	124	88	733	21	....	....	77
Bone Mills, Manures, &c.	68	128	45	4	....	...	46
Glue, Oil, and Grease	154	33	....	20	....	....	3
Tanneries and Fellmongeries..	1,014	1,693	724	262	22	133	1,629
Wool-scouring	1,330			93	....	....	
Total.....	2,690	1,942	1,502	400	22	133	1,755

It is difficult to say if the figures are compiled for all the provinces upon the same basis. In New South Wales and Victoria wool-scouring works on sheep stations are not included, as the hands are employed in such works at most during the shearing season, and frequently for only a few weeks. The number of hands employed in treating raw material, the product of the pastoral industries, varies greatly from year to year, and, owing to the decrease in the number of live stock depastured, is much less than formerly.

The industries connected with food and drink afford employment for a large number of hands, the distribution into detailed groups being as shown in the succeeding table. The figures for the most part afford their own explanation. Included under the head of cornflour, oatmeal, and arrowroot are, in the case of Victoria, a small number of hands making macaroni and some starch makers ; these last are few in number, and it was not found possible to exclude them from the persons employed in making farinaceous foods, otherwise they could have been classed elsewhere. It has been necessary, owing to an arrangement made between the statistical offices of New South Wales and Victoria, that factories dealing with milk products should be included in the list of manufactories, although they are not properly classed as manufactories, and the subject of dairying is treated at length in another part of this volume. It has also been found necessary to alter the Queensland figures from the published returns of that colony, as the farm workers and

factory hands have been grouped together, whereas, for the purposes of this table, factory hands only are required.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Aerated Waters	1,008	1,102	651	97	305	....	347
Biscuits	744	836	193	86	....	....	425
Breweries and Maltsters	885	1,265	436	373	366	87	560
Condiments, Coffee, Spices	480	236	98	80	67	....	138
Confectionery	613	727	311	124	70	....	69
Cornflour, Oatmeal, Arrowroot	112	353	70	....	....	....	....
Distilling	....	134	17	104	....	....	....
Flour Mills	815	763	197	422	97	121	419
Ice Making	....	68	78	20	58	....	3
Jam, Fruit-canning, Pickles, Vinegar	692	1,316	265	188	45	349	267
Meat-preserving, Refrigerating	1,509	747	2,445	111	....	13	2,190
Milk Products (Butter, Cheese, Condensed Milk)	1,010	1,392	300	174	....	71	598
Olive Oil	....	....	....	8	....	....	....
Sugar Mills	1,038	240	3,962	....	....	....	....
Sugar Refineries	450	307		95	....	....	169
Salt	....	71	....	108	....	....	....
Total	9,356	9,557	9,023	1,990	1,008	641	5,176

The most noticeable point about the table is the strong position of Queensland, the hands employed in that colony very nearly equalling those of Victoria and New South Wales, a position which Queensland is able to take up owing to the extent of its sugar and meat-preserving industries.

Industries connected with the manufacture of clothing and textile fabrics afford more employment than does any other class. From the following table it will be seen that Victoria employs more hands than any other province in every class of industry except textiles, in which it is surpassed by New Zealand. The colony last named has 1,416 hands employed in woollen mills compared with 917 in Victoria and 222 in New South Wales. New Zealand has also 647 hands in flax mills; in no other colony has the flax industry been established :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Boots and Shoes	3,510	4,288	1,699	1,116	295	316	2,349
Clothing other than Dressmaking and Millinery	4,658	7,541	1,921	1,658	617	....	2,058
Dressmaking and Millinery	1,938	3,782	....	....	235	....	....
Flax Mills	....	....	....	....	....	....	647
Furriers	25	29	....	....	....	....	....
Hats and Caps	184	809	27	50	....	....	72
Woollen Mills	222	917	148	78	....	157	1,416
Water-proof Clothing and Oil Skins	447	253	....	....	....	....	93
Others	....	109	....	25	....	....	155
Total	10,984	17,728	3,795	2,927	1,147	473	6,790

The grouping of industries under the heading preparation and manufacture of building materials is attended with some difficulty, especially when an attempt is made to give detailed information. There appears to be only one establishment in Australasia preparing crude asphalt for industrial purposes, this establishment is at Sydney. There are many so-called asphalt works, that is, works preparing coal tar, sand and screenings for pavement purposes, but these have been excluded from the returns. The hands employed making earthenware and pottery can be given for three provinces—New South Wales, 417 ; Queensland, 119, and South Australia 95. For the other provinces these industries are included with brickmaking, and have been so grouped in the accompanying table. In distinguishing in the table between sawmills and joinery works the Statistical Registers of the various provinces have been followed ; nevertheless, it is clear that some joiners are included with sawmill-hands in New South Wales, and all such hands are included with sawmills in New Zealand, so that neither grouping affords a fair comparison for all the colonies. Under the heading of stone-dressing, polishing, modelling and monumental works, the chief employment in all the colonies is the preparation of tombstones—an industry which might well be omitted from a tabulation of manufactures and works.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Asphalt	42	....	....	....	....	....	....
Bricks, pottery, earthenware	1,865	1,312	412	340	260	204	455
Joinery	735	1,639	583	401	532	....	....
Lime, plaster, and cement	125	216	106	91	....	....	79
Paints and varnishes	16	47	....	8	8	....	....
Sawmills	3,004	1,467	2,008	281	2,799	783	4,059
Stone-dressing, polishing, modelling and monumental works	451	338	87	64	18	....	....
Wood-turning and carving	39	112	18	13	....	....	81
Total	6,277	5,131	3,214	1,198	3,617	987	4,674

Works connected with the treatment of metals, manufacture of machinery, agricultural implements, and railway rolling stock form a large and growing class of industry. The grouping given below is not by any means satisfactory. In Queensland for example all metal works, except smelting, are grouped in the one line, which is also the case in several of the other colonies. Only three colonies show hands employed in the manufacture and repairs of rolling stock ; this, of course, is misleading, for though little manufacturing may be carried on, all colonies make their own repairs. In Victoria 1,697 hands are shown as employed in railway carriage and rolling stock manufacture and repairs as compared with 2,908 in New South Wales. The employment afforded in railway workshops is chiefly in the nature of repairs, but locomotives, passenger carriages, and goods waggons are built in each

colony. In New South Wales the wages paid in railway workshops amounted in 1900 to £390,284, and in Victoria to £253,218; the repairs in the former colony are therefore on a much more extensive scale than in the latter. The number of hands set down as employed in the manufacture of agricultural implements in New South Wales is only 193, few establishments devote themselves entirely to this business, the manufacture of implements being usually associated with ironworking generally. New South Wales and South Australia possess smelting works on a large scale, affording employment to 3,339 hands in the first-named colony, and to 2,405 in the latter. The chief smelting works of New South Wales are situated at Newcastle, at Lake Macquarie, and at Dapto, in close proximity to the coal-fields, and at Broken Hill. The chief ores treated are copper, tin, silver, and lead, partly the production of the colony itself, and partly of Tasmania, South Australia, Western Australia, Queensland, and New Caledonia. The smelting works of South Australia are situated at Port Pirie, and deal with silver and lead ore from Broken Hill.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Agricultural Implements	193	1,107	....	242	38	....	581
Brass and copper smelting ..	167	497	....	....	....	....	....
Galvanized iron, sheet iron, tinsmithing	618	676	....	58	....	....	379
Ironworking, engineering, foundries, &c.	3,950	4,855	3,862	2,696	783	316	1,642
Lead Works	83	34	....	....	....	....	....
Railway carriages, rolling stock manufacture, and repairs	2,908	1,697	....	....	924	....	....
Smelting	3,339	71	151	2,405	....	....	....
Wireworking	197	77	....	19	....	....	....
Others	446	409	....	209	....	....	21
Total.....	11,901	9,423	4,013	5,629	1,745	316	2,623

In industries connected with ship-building and repairing, New South Wales has a far larger number of hands employed than has any other province. The chief part of the business is in connection with the docking of ships, in which about 1,150 hands find work. In ship and boat building there are, probably, not more than 250 hands employed.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Docks and ships	1,240	110	183	....	....	....	29
Sails, tents, and tarpaulins ..	102	43		11	....	....	143
Ship and boat building and repairs	157	15		70	27	....	109
Total.....	1,499	168	183	81	27	....	281

The manufacture of furniture, bedding, &c., affords employment to 4,491 hands, of whom 1,701 are in New South Wales and 1,446 in Victoria. As Australia and New Zealand produce various kinds of wood admirably adapted to the requirements of the furniture trades, it can hardly be said that the industry has attained a development equal to its opportunities. As showing the possibilities of the industry, it may be mentioned that the value of furniture imported into New South Wales alone in 1899 was £101,400, and of bedding, flock, and upholstery, £47,800.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Bedding, flock, upholstery....	416	407	165	....	....	....	25
Furniture	1,180	940	411	....	160	....	506
Picture-frames	71	59	....	28	....	....	....
Window-blinds	34	40	....	4	....	....	45
Total.....	1,701	1,446	576	32	160	....	576

The different industries connected with printing, bookbinding, paper-making, &c., afford work to 17,169 persons. The great bulk of these are employed in the various processes of printing, actual manufacturers being comparatively few in number. Australia and New Zealand produce many excellent paper-making materials ; nevertheless, only 319 persons are employed in paper-making, and a large proportion of the output of the mills is ordinary brown or wrapping papers. Under the head of printing are included the composing and mechanical staff of the newspaper offices—persons whom it takes a very wide definition to bring in under the term "manufacturers."

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Electrotyping and stereotyping	24	....	....	....	....	....	....
Paper bags, boxes, &c.	191	....	71	....	....	....	86
Paper	56	179	....	....	....	....	84
Printing and bookbinding....	4,714	4,977	2,037	989	782	547	2,351
Printing materials	69	12	....	....	....	....	....
Total.....	5,054	5,168	2,108	989	782	547	2,521

In connection with the manufacture and repair of vehicles, saddlery, harness, &c., there are 8,031 hands employed. The great bulk of the work done in connection with coaches and waggons is repairing; but there are establishments in all the provinces where vehicles of all classes are manufactured. No hands are set down in the statistics of Tasmania as employed in these industries. It is probable there must be at least 300 so employed, and this figure appears in the following table :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Coaches and waggons	1,472	1,817	670	384	336	250	807
Saddlery, harness, whips, &c.	461	495	775	157	70	50	270
Spokes	17	....	....	....	....	...	....
Total	1,950	2,312	1,445	541	406	300	1,077

Industries connected with the production of fuel, heat, and light do not afford employment to many hands. The following table shows 2,854 hands, of whom 1,947 are employed in gasworks, 467 in electric-lighting works, 253 in coke making, and 187 in manufacturing matches. The coke workers in Victoria are included with hands employed in gas-works, and coke workers and hands employed in electric-lighting are grouped together in Queensland. The number of hands employed in manufacturing candles is not included in the following table. The soap and candle industries are usually worked together, so that it is not possible to separate the two classes, which are accordingly grouped together under the heading of soap and candle workers, on the next page.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Coke	253	....	87	....	....	....	....
Electric light	147	147		....	86	....	....
Gas	587	686	220	65	54	40	295
Matches	....	62	....	....	....	....	125
Total	987	895	307	65	140	40	420

Under the heading of miscellaneous are grouped a very large number of manufactures, many of them small, but some of them of considerable importance; amongst the latter may be mentioned—tobacco manufactories, employing 2,212 hands; chaff-cutting and corn-crushing, 1,510 hands; chemical, drug, and patent medicine factories, 1,206 hands;

glass-works, 1,047 hands; rope-works, 841 hands; and soap and candle works, 1,435 hands. Further particulars regarding these and the other industries included in the list will be found in the Statistical Registers of the various provinces.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	No.	No.	No.	No.	No.	No.	No.
Baskets and wickerware, mats and matting	89	34	57	84	....	....	76
Bicycles	6	188	....	107	22	....	125
Boxes and packing cases	155	263	....	84	....	....	....
Brooms and brushes	113	236	36	....	....	....	92
Catgut and sausage-skins	10	....	....	....	....	....	56
Chaff-cutting and corn-crushing	256	886	....	156	....	....	212
Chemicals, drugs, and patent medicines	270	618	....	130	23	....	165
Cooperage	210	124	168	26	8	....	76
Cutlery	8	41	....	....	....	....	6
Dye works	35	54	....	14	....	....	58
Electro-plating	43	....	....	....	....	....	6
Fancy leather	80	84	....	....	....	....	....
Glass (including bottles)	239	646	....	40	....	....	6
Glass (ornamental)	110		....	5	....	....	1
Ink	7	....	....	....	....	....	2
Jewellery (manufacturing)	71	470	....	85	31	....	....
Lamps	57	18	....	....	....	....	....
Perambulators	27	14	....	....	....	....	....
Photo-engraving	30	....	....	....	....	....	....
Portmanteaux	81	40	33	....	....	....	13
Rope, fishing-lines, and twine	150	449	39	53	....	....	150
Rubber goods	12	....	....	....	....	....	4
Soap and candles	287	438	179	189	66	86	190
Surgical and other scientific instruments	58	19	....	....	....	....	....
Tobacco, cigars, and cigarettes	649	1,041	250	196	57	....	19
Other industries	194	637	272	134	146	106	186
Total	3,247	6,300	1,034	1,303	353	192	1,443

Plant Employed in Manufactories.

The horse-power of machinery available for use in manufactories cannot be stated for all the colonies, but the amount actually in use can be given, as well as the approximate value of the plant. The particulars for the latest years available are :—

State.	Year.	Horse-power employed.	Value of Plant.
		No.	£
New South Wales	1899	33,180	5,640,384
Victoria	1899	33,046	4,632,629
Queensland	1899	27,580	4,536,508
South Australia	1899	13,493	1,835,850
Western Australia	1898	7,432	1,254,935
Tasmania	1898	2,853	302,418
New Zealand	1896	28,096	2,988,955
Total	.....	145,680	21,191,679

The average value of plant per horse-power of machinery employed ranges from £106 in the case of New Zealand to £164 for Queensland, and £170 for New South Wales. A mere statement of values, however, has no special meaning since the difference in the figures is compatible with two opposite conditions—either the same plant is put to greatest use in the case of New Zealand, or it is of superior character in the case of New South Wales and Queensland.

It will be seen that the figures just given are not all for the same date. The returns for some of the colonies for 1899 had not been published when this volume was printed, while, as regards New Zealand, later figures than for 1896 are not available.

Value of Production of Manufactories.

The gross value of articles produced in manufacturing establishments, and the value added to materials in the process of treatment is known for most of the colonies. Where the information is not directly obtained by the statistical officers an estimate has been made, and the material for such an estimate is fairly ample, except in the case of Western Australia. The information has been brought up to the year 1899, and care has been taken to exclude the production from establishments such as butter, cheese, and bacon factories—the output of which is already included under pastoral and dairy industries. The total value of the output of all factories was £61,310,000, of which £27,994,000 represent fuel and value of materials, and £33,316,000 the value added in the various processes ; and of the sum last mentioned £15,374,000 was paid as wages, leaving a balance of £17,942,000 as the sum added to the

materials and labour employed during the processes of manufacture or treatment. Taking the added value as the difference between the total output and the materials and fuel consumed, the distribution of this amount (£33,316,000) between the various States was as follows :—

State.	Value of Production.	Value per Inhabitant.
	£	£ s. d.
New South Wales	9,207,000	6 16 10
Victoria	10,052,000	8 13 0
Queensland	4,772,000	10 0 1
South Australia	2,655,000	7 4 4
Western Australia	1,515,000	8 18 8
Tasmania	465,000	2 11 9
Commonwealth	28,666,000	7 14 10
New Zealand	4,650,000	6 4 0
Australasia	33,316,000	7 9 8

In the last edition of this work the total value of the production of Victorian manufactories for 1896 was set down at £11,318,000. This figure was deduced from the results of the census of 1891, which showed a gross production of £22,390,251, less value of materials used £12,006,233—that is to say, £10,384,018. There were, however, several important considerations overlooked which have now been attended to. The Victorian official figures did not include the important item of fuel as material used, and a probable deduction of £520,000 should have been made on this score ; in the materials used no allowance was made for the value of Victorian timber cut in sawmills, which appears to have been worth £608,759, nor for the raw material used up by potteries and brickyards. There were other corrections to be made, such as the exclusion of the value of milk products which appear under the head of dairy farming. In the foregoing table proper allowances have been made, and the figures relating to each colony have been compiled on exactly the same basis. The table just given shows that, in proportion to population, Queensland holds the first place, a circumstance due to the existence of important sugar and meat-preserving industries in that colony. Western Australia stands second, but the dearness of products, caused by the remoteness of the colony and the heavy cost of transport, gives to Western Australia a fictitious importance compared with the other provinces ; but when every allowance is made on this score it will be found that the industries of the colony are on a substantial basis. Victoria ranks first as regards gross value of products, and third when viewed from the standpoint of population, the gross production exceeding that of New South Wales by about £850,000, and the production per head by £1 16s. 2d.

Value of Production of all Industries.

Full particulars regarding the value of primary production have already been given in previous chapters; combining the results there shown with the value of manufactures, the total value of production during the year 1899 was £137,570,000, of which amount the total of each colony and the value per inhabitant were as follow:—

State.	Value of Production.	Value per Inhabitant.
	£	£ s. d.
New South Wales	38,579,000	28 13 7
Victoria	30,870,000	26 11 4
Queensland	18,561,000	38 18 4
South Australia	8,958,000	24 6 11
Western Australia	10,215,000	60 4 10
Tasmania	5,090,000	28 6 4
Commonwealth	112,273,000	30 6 8
New Zealand	25,297,000	33 14 7
Australasia	137,570,000	30 18 0

The distribution of the production of the colonies under the various branches of primary and other productive industries was as follows:—

State.	Agriculture.	Pastoral Industries.	Dairying, Poultry, and Bee Farming	Mining Industries.	Forestry and Fisheries.	Manufactories.
	£	£	£	£	£	£
New South Wales	5,582,000	14,527,000	2,543,000	6,081,000	639,000	9,207,000
Victoria	6,435,000	7,219,000	3,384,000	3,579,000	201,000	10,052,000
Queensland	1,848,000	7,283,000	889,000	3,140,000	629,000	4,772,000
South Australia	2,568,000	2,503,000	671,000	516,000	45,000	2,655,000
Western Australia	500,000	869,000	251,000	6,346,000	734,000	1,515,000
Tasmania	996,000	687,000	285,000	2,539,000	118,000	465,000
Commonwealth	17,929,000	33,088,000	8,023,000	22,201,000	2,366,000	28,666,000
New Zealand	7,318,000	7,707,000	2,354,000	2,657,000*	611,000	4,650,000
Australasia	25,247,000	40,795,000	10,377,000	24,858,000	2,977,000	33,316,000

* Kauri gum production included hereunder.

Compared with the older countries of the world, the amounts stated above are by no means insignificant, and in production per head Australasia exceeds any other country for which records are available. Although the data on which an exact statement can be founded are incomplete, there is sufficient information to warrant the assertion that from primary industries alone Australasia produces more per inhabitant than is produced from the combined industries of any other country, and

a consideration of this fact will perhaps explain the ease with which these colonies bear their apparently great indebtedness, and the general prosperity they enjoyed until the disturbances incident to the banking crisis unsettled general business. The following figures, giving the value of production from primary industries in the principal countries of the world, are, with the exception of those for the Australasian colonies, taken from Mulhall's *Dictionary of Statistics* :—

Country.	Total Production in Primary Industries.	Per head of Population.
	£	£ s. d.
United Kingdom	317,000,000	7 18 6
France	451,000,000	11 11 6
Germany	465,000,000	8 13 4
Russia	594,000,000	4 19 8
Austria	347,000,000	8 7 11
Italy	212,000,000	6 17 1
Spain	143,000,000	8 4 3
Portugal	28,000,000	5 10 2
Sweden	50,000,000	10 1 11
Norway	15,000,000	7 6 2
Denmark	36,000,000	10 4 0
Holland	37,000,000	7 17 5
Belgium	55,000,000	8 16 6
Switzerland	21,000,000	7 2 1
United States	1,037,000,000	14 14 0
Canada	83,000,000	16 5 6
Australasia (1899)	104,254,000	23 8 4
New South Wales	29,372,000	21 16 9
Victoria	20,818,000	17 18 4
Queensland	13,789,000	28 18 3
South Australia	6,303,000	17 2 7
Western Australia	8,700,000	51 6 2
Tasmania	4,625,000	25 14 7
New Zealand	20,647,000	27 10 7

Judged by the aggregate production, New South Wales stands far above the other colonies, a position which it owes to the largeness of its interests in pastoral pursuits. The value of the return from this industry was £14,527,000, a sum greater than the total production from all primary industries in every colony except Victoria and New Zealand. In value of primary production per inhabitant, Western Australia stands easily first with the very high production of £51 6s. 2d. per head. Queensland comes next, closely followed by New Zealand and Tasmania, while South Australia is lowest with only one-third of the production per head of Western Australia. The high position occupied by Western Australia is due to its great production of gold, and to its large timber industries. Queensland owes its position to its pastoral resources, the production from which reached £15 5s. per inhabitant.

A comparison of the production of the colonies from primary industries per head of population, however, is liable to give an undue importance to those provinces which have large territories and scanty population; for it is but a natural expectation that where the population of a country is dense a large proportion of the inhabitants will be engaged in other than primary industries. If the value of primary production, therefore, be compared with the extent of territory enjoyed by each colony, it will be found that the positions of several of the provinces are reversed. Thus, Victoria occupies first position with an average primary production of £236 17s. 5d. per square mile, while Western Australia has the second lowest return of £8 18s. 4d. The following, as well as the preceding table, bears testimony to the great natural resources of New Zealand, which has an average production per head of £27 10s. 7d., and per square mile of £197 12s. 8d. :—

State.	Production of Primary Industries per square mile.		
	£	s.	d.
New South Wales	94	10	8
Victoria	236	17	5
Queensland	20	12	6
South Australia	6	19	6
Western Australia	8	18	4
Tasmania	176	8	6
Commonwealth	28	2	6
New Zealand	197	12	8
Australasia	33	17	6

If the value of production in all the industries be related to the area of territory possessed by each colony, which is a favourite comparison with some statisticians, the following results are obtained. There is, however, no necessary connection between the production of the manufacturing industries of a country and the area of its territory, the development of manufactures depending upon entirely different considerations :—

State.	Total production per square mile.		
	£	s.	d.
New South Wales	124	3	4
Victoria	351	4	11
Queensland	27	15	4
South Australia	9	18	3
Western Australia	10	9	4
Tasmania	194	3	3
Commonwealth	40	4	0
New Zealand	242	2	11
Australasia	44	14	1

A comparison of the value of production in 1899 with that of previous years brings out the fact that in spite of many adverse conditions these colonies are holding their own. In 1899 the value per head was £30 18s., which was greater than in 1891 or than in 1871, and only a few shillings below the average of 1881. This is an excellent result considering the continuous fall in prices from 1871 to 1894. If the prices of 1871 had been maintained, the following results would have been obtained, which for purposes of comparison are set against the actual results :—

Year.	Average value of production per inhabitant.	Average value of production if 1871 prices had been obtained in each year
	£ s. d.	£ s. d.
1871	28 7 0	28 7 0
1881	31 0 7	37 3 10
1891	30 3 3	45 2 10
1899	30 18 0	45 0 2

During the interval of eight years between 1891 and 1899 the sheep depastured in Australasia declined in number from 125 millions to 94 millions, while there was also a large decrease in other classes of stock, and the satisfactory results shown in this and the succeeding table were achieved in spite of the shrinkage in the return from the leading industry. The total value of production for each of the years named was as follows :—

State.	1871.	1881.	1891.	1899.
	£	£	£	£
New South Wales...	15,379,000	25,180,000	36,739,760	38,579,000
Victoria	19,260,000	22,750,000	30,319,610	30,870,000
Queensland	3,995,000	10,200,000	14,273,660	18,561,000
South Australia... ..	5,228,000	8,457,000	9,025,675	8,958,000
Western Australia..	707,000	943,000	1,806,340	10,215,000
Tasmania.....	2,131,000	3,586,000	3,920,940	5,090,000
Commonwealth ...	46,700,000	71,116,000	96,085,985	112,273,000
New Zealand	9,739,000	16,490,000	21,518,915	25,297,000
Australasia.....	56,439,000	87,606,000	117,604,900	137,570,000

LOCAL GOVERNMENT.

Municipal Institutions.

ONLY of recent years has the question of Local Government received the attention which its importance demands, the only States of the Commonwealth that have adopted general systems being Victoria, Queensland, South Australia, and Tasmania. New Zealand, however, has also for a number of years been divided into districts, with local governing powers. It will be noted, from the information given in the following pages, that the Acts controlling Local Government vary considerably, especially as regards the election of representatives and presiding officers, method of valuation, and rating powers ; and the particulars available in regard to each State are not sufficiently exhaustive to admit of the making of any effective comparison between the systems of the different colonies.

The first portion of this chapter is devoted to an account of the local bodies operating under the various Municipal Acts, while the particulars relating to Boards and Trusts, for the establishment and control of which special Acts have in most cases been passed, will be found in the second part.

New South Wales.

The first Act providing for the establishment of a Local Council in this State was passed in 1842, when the City of Sydney was incorporated. In 1867, the Municipalities Act became law, but as that Act left it optional for any district to become constituted as a municipality, only a small proportion of the area of the Colony is incorporated.

Under the provisions of the original Acts, the aldermen were elected by the ratepayers (except in the City of Sydney, where both owners and occupiers voted), and the mayors were chosen by the aldermen. By legislation enacted in 1900 the franchise has been extended to tenants and lodgers.

The legislation of 1900 consists of two important measures, viz., the Sydney Corporation Amending Act and the Municipalities Amendment Bill. Under the provisions of the first-mentioned Act, the City of Sydney is divided into twelve wards, each returning two aldermen, instead of into eight wards, each represented by three aldermen, as heretofore. The mayor is still to be elected by the aldermen, as the proposal to provide for his election by the citizens was not carried. Other important amendments are those providing (1) for the abolition of auditors elected by citizens, with the substitution of Government inspectors to audit the accounts ; and (2) for the resumption of land for the opening or enlarging of streets or public places. The rating powers

have not been altered, the general rate remaining at not more than 2s. in the £ of the annual value, but lighting and other special rates may also be imposed, if necessary.

The Municipalities Act of 1867 provided that the general rate should not exceed 1s. in the £ of the annual value, but that special rates could be levied, so long as the general and special rates together did not come to more than 2s. in the £. A further charge, limited to 6d. in the £, could be made for street watering, and an additional rate for water supply, where necessary, the amount not to exceed 1s. in the £. The amending Bill of 1900 proposes to give power to the councils to increase the general rate to as much as 2s. 8d. in the £ of the annual value if necessary, but the special rates still remain as quoted in the original Act. A most important alteration in the principles of municipal taxation is the authority to be conferred on the municipalities to levy their rates on the unimproved capital value of the land instead of on the annual value of all property, provided the ratepayers agree to the alteration by a special vote. The assessment of the unimproved value must not exceed 2d. in the £ of the assessed capital value.

New South Wales, as already indicated, is the most backward in regard to local governmment. The principle of self-government is on all sides recognised as a sound one, and various measures to secure its application have from time to time been placed before Parliament, but so far the Legislature has not succeeded in giving effect to the manifest wishes of the constituencies. The total area incorporated at the close of the municipal year 1898–9 was only 2,761 square miles, so that it will be seen that a large area still remains under the control of the central government in New South Wales; but for this some justification exists in the largeness of the territory and the sparseness of the population residing in the unincorporated areas. The total area still unincorporated in New South Wales amounts to 307,939 square miles.

The total capital value of all property in municipalities is returned as £121,213,800, and the annual value as £7,412,100, so that the annual return from property was about 6·11 per cent.

The annual and capital values of Sydney and suburbs since 1891 are shown below:—

Year.	Sydney and Suburbs.		Year.	Sydney and Suburbs.	
	Annual Value.	Capital Value.		Annual Value.	Capital Value.
	£	£		£	£
1891	5,851,589	99,224,810	1896	5,141,990	91,427,100
1892	6,013,697	106,891,100	1897	5,022,910	88,464,400
1893	6,067,882	110,061,000	1898	4,965,400	86,927,600
1894	5,686,197	108,951,000	1899	4,995,200	87,464,000
1895	5,352,920	96,692,200			

A reference to these figures will show the depreciation which has taken place in the value of real estate during the past few years, but it is satisfactory to note that the year 1899 shows a small increase compared with the previous year.

The values of five of the principal towns are given in the subjoined table, and for the purposes of comparison, the corresponding figures for 1891 are shown. With regard to Broken Hill, it should be remembered that the mines were not fully developed in 1891, and although the capital value has increased by about £364,000, as shown below, the values in the years 1894 and 1895 were stated to be £2,952,000, and £2,862,000 respectively, but for 1896–7 the figures declined to £1,232,600, which is practically the value in 1898–9 :—

Town.	1891.		1898–9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Bathurst	69,426	735,710	55,325	946,600
Broken Hill	136,217	865,580	206,290	1,229,400
Goulburn	88,200	930,000	61,675	945,600
Newcastle and suburbs	411,028	5,525,500	314,200	5,007,000
Parramatta	83,986	1,692,000	62,160	1,243,100

Taking the municipalities as a whole, the following particulars in regard to the number of municipalities, the area incorporated, and the annual and capital values of property assessed for municipal purposes, will not be without interest. The figures relate to all municipalities, and cover eleven years :—

Year.	No. of Municipalities.	Area Incorporated.	Annual Value.	Capital Value.
		acres.	£	£
1889	145	1,357,916	7,365,444	120,285,095
1890	158	1,527,772	7,792,350	127,212,046
1891	165	1,564,406	8,356,803	134,009,758
1892	168	1,637,046	8,697,503	144,277,400
1893	171	1,660,675	8,929,475	150,938,000
1894	175	1,683,990	8,460,674	151,226,000
1895	182	1,754,941	7,895,645	136,202,100
1896	183	1,767,079	7,603,735	127,499,700
1897	183	1,767,749	7,430,120	122,787,000
1898	184	1,768,500	7,379,350	120,625,600
1899	184	1,768,500	7,412,100	121,213,800

The revenues of municipalities are derived chiefly from rates, but under the Act of 1867 the Government allows an endowment for the

first fifteen years following incorporation, the scale being £ for £ of general rates received during the first five years, 10s. per £ during the next five years, and 5s. per £ for the remaining period. The Government also contributes grants in aid of roads and other works, and occasionally a special endowment is given. The following table shows the receipts during 1898–9, the Government endowments and grants being specified :—

Total receipts—	£
Government	81,022
Rates, &c.	707,221
Total	788,243

Receipts per inhabitant in incorporated area—	£ s. d.
Government	0 2 0
Rates, &c.	0 17 10
Total	0 19 10

Receipts per square mile of incorporated area—	
Government	29 6 11
Rates, &c.	256 2 11
Total	285 9 10

The total expenditure for the same period amounted to £799,069, distributed as follows :—

	£
Public works, services, and improvements	444,715
Interest on loans and overdrafts	135,114
Repayments of loans	90,973
Salaries and office expenses	71,608
Payments to sinking funds	14,978
Other expenditure	41,681
	£799,069

The proportion of the expenditure incurred for interest on loans and overdrafts was about 17 per cent., while the average rate of interest payable on the liabilities was 4·61 per cent.

The amount of loans and secured overdrafts outstanding on the 6th February, 1899, was £2,736,703, of which £1,345,085 was raised in London, principally by the city of Sydney, while of the balance, £18,396 was floated in Victoria, and £1,373,222 in New South Wales. The unsecured overdrafts amounted to £192,310, so that the total liability on which interest was payable was £2,929,013. The interest charged ranged from 3½ to 7½ per cent. for the secured loans, and from 4 to 8½ per cent. on the unsecured overdrafts. Against the total liability, sinking funds have been established, the total amount at the credit of such funds being £298,385.

Victoria.

In Victoria a comprehensive system of local government has been in force for many years. In 1842 the Act of the Legislative Council of New South Wales, which incorporated Sydney, also constituted Melbourne a municipality, and in 1874 the general system was inaugurated. Under this system the State is divided into cities, towns, boroughs, and shires, and the total area under local control is 87,342 square miles, only 542 square miles remaining unincorporated.

The councillors are elected by the ratepayers, and the mayors of cities, towns, and boroughs, or presidents of shire councils, are elected by the councillors. A general rate of not more than 2s. 6d. or less than 6d. in the £ of the annual value may be imposed, but special rates may be levied, provided that general and special rates together do not exceed 2s. 6d. in the £. A further special rate, limited to 6d., may also be charged for works in particular parts of any district.

The total capital value of property assessed for municipal purposes in 1899 was £168,611,906, while the annual value was £10,152,500, the figures for Melbourne and suburbs being £60,626,915 and £3,973,357 respectively. The values for the metropolitan district since 1891 are given below, and it will again be noticed how great has been the decrease during the period under review, though, as in the case of New South Wales, the figures for 1899 show a small increase over those of the previous year :—

Year.	Melbourne and Suburbs.		Year.	Melbourne and Suburbs.	
	Annual Value.	Capital Value.		Annual Value.	Capital Value.
	£	£		£	£
1891	6,533,717	87,939,287	1896	4,299,515	60,962,705
1892	6,815,315	92,358,629	1897	4,168,182	60,352,040
1893	6,639,014	88,510,328	1898	3,968,888	60,404,877
1894	5,847,079	78,916,730	1899	3,973,357	60,626,915
1895	4,984,596	66,824,384			

The annual and capital values for the five principal provincial centres for 1891 and 1898–9 will be found in the following statement :—

City, Town, or Borough.	1891.		1898–9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Ballarat	171,484	2,572,260	156,790	2,351,830
Ballarat, East	78,264	782,640	78,340	1,175,100
Bendigo	167,305	1,673,050	188,850	2,266,200
Geelong	92,697	926,970	87,870	1,757,460
Geelong, West	28,317	339,804	26,140	365,900

The revenue of the local governing bodies is chiefly derived from taxation, under the headings of general and special rates, licenses, dog fees, market and weighbridge dues, &c. The total amount collected from all sources during the year ended September, 1898, was £1,115,754, of which £92,328 was contributed by the Government, either as endowment or special grant, while the amount of general rates, &c., received was £832,489, which represents the local taxation. The balance, £190,937, includes sanitary fees amounting to £54,344, and also £52,473 received as rents of municipal property. The receipts per inhabitant in incorporated areas amounted to 19s. 2d., and per square mile, £12 15s. 6d.

The total expenditure for the year was £1,173,039, of which £696,786 were spent on public works, &c., while the amount paid for interest was £166,545. The payments to sinking funds were £37,499, and the repayments of loans from revenue, £12,250, the principal items in the balance being—salaries, £132,757, and printing, &c., £20,955. The proportion paid as interest on loans and overdrafts was about 14 per cent. of the total, while the average interest payable on loans and overdrafts amounted to about £4 1s. 4d. per cent.

The municipal loans outstanding were £3,985,314, and the bank overdrafts amounted to £108,781, giving a total interest-bearing liability of £4,094,095. The total liabilities were £4,745,896, the principal items being—arrears due to sinking funds, £312,954 ; overdue interest on loans, £171,258 ; and amounts due on contracts, £47,206. The assets totalled £3,774,326, the chief items being—municipal property, £2,216,152 ; sinking funds, £917,467 ; outstanding rates, £231,726 ; and bank balances and cash in hand, £39,676.

The number of municipalities with the annual and capital values of property assessed for local purposes for the ten years ending with 1899, were as follows :—

Year.	No. of Municipalities.	Annual Value.	Capital Value.
		£	£
1890	192	12,931,526	187,558,511
1891	197	13,265,543	194,313,646
1892	198	13,733,770	203,351,360
1893	201	13,605,990	197,366,940
1894	203	12,779,600	189,461,350
1895	207	11,676,079	174,984,851
1896	208	10,641,200	167,197,780
1897	208	10,393,000	168,427,700
1898	208	10,345,535	171,253,984
1899	208	10,152,500	168,611,906

QUEENSLAND.

The beginning of local government in Queensland was the proclamation constituting Brisbane a municipality, the date of which was the 6th September, 1859, or about three months prior to the separation of the colony from New South Wales. A general system of government by local authorities was inaugurated in 1878, when the colony was divided into boroughs, shires, and divisions.

The aldermen, councillors, and members are elected by ratepayers in boroughs, shires, and divisions respectively, while mayors of boroughs and chairmen of shires and divisions are chosen by the representatives.

Under the provisions of the original Act, the rates were levied on the annual value, and the maximum general rate was 1s. in the £ for boroughs, shires, and divisions, but the minimum was 6d. per £ for boroughs and shires, and 4d. per £ in divisions. Special rates could also be imposed for sewerage, drainage, lighting, street-watering, or particular works. By an amending Act passed in December, 1890, the rates are now charged on the unimproved capital value of the land, the maximum being 2d. in the £ for boroughs and shires, and 1½d. in the £ for divisions, while the minimum is ½d. in both cases. The separate rates may still be charged, and if waterworks have been established a further rate may be imposed for that service.

The total area controlled by local bodies is 668,252 square miles, leaving only 245 square miles unincorporated. The total capital value at the end of 1898 was estimated to be £41,486,971, and the annual value £2,792,600. The annual and capital values of Brisbane and some of the other large boroughs are given below for 1891 and 1898–9 :—

Municipality.	1891.		1898–9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Brisbane	880,035	8,800,350	575,574	5,755,740
South Brisbane	260,584	2,605,840	140,418	1,404,180
Rockhampton	132,360	1,323,600	105,983	1,059,830
North Rockhampton	19,050	190,500	15,493	154,930
Townsville	159,000	1,590,000	78,778	787,780
Toowoomba	71,142	711,420	59,228	592,280

North Rockhampton has been included, as it is a suburb of Rockhampton.

The receipts for the year 1898–9 amounted to £487,227, the chief sources being—Government endowments, grants, and loans, £116,030, and rates, £239,391, leaving £131,806 derived from other sources.

The expenditure for the same period was £506,137, the amount spent on public works being £338,028, while repayments of loans and interest amounted to £41,344, salaries and office expenses to £47,484, and all other disbursements £79,281.

The outstanding loans, including overdue instalments payable to the Government, amounted to £984,739, the whole of which, with the exception of the loans of the city of Brisbane and part of the indebtedness of South Brisbane, is due to the Government, as no local body, except the two mentioned, is allowed to borrow from outside sources.

The total assets on the same date were given as £1,305,123, the only item specified being outstanding rates, which amounted to £110,725.

The following table shows the assessed value of unimproved land upon which the rates are struck, and the annual value of properties in all the local government districts of Queensland :—

Year.	Assessed Value of Unimproved Land.	Annual Value.
	£	£
1892	44,188,698	2,974,460
1893	43,427,923	2,923,250
1894	41,772,975	2,811,850
1895	40,821,733	2,747,820
1896	40,810,384	2,747,060
1897	41,009,739	2,760,480
1898	41,486,971	2,792,600

South Australia.

Adelaide, the capital of South Australia, was proclaimed a municipality as far back as 1840, and was thus the first local body established in Australasia. The present general system of corporations and district councils was instituted in 1887.

In all cases the councillors and mayors are elected by the citizens, the representatives not being empowered to choose their presiding officer. The rates are assessed on the annual value, and the general rate must not exceed 1s. in the £ ; while lighting rates are limited to 4d., and park improvement rates to 3d. Water rates may also be imposed where necessary, and special rates for works in particular portions of municipalities.

The total area incorporated at the close of the last municipal year was 41,851 square miles, leaving 338,219 square miles still under the control of the central government. The large extent still unincorporated consists chiefly of the unsettled portion of the Colony, as the populous centres have all been brought under municipal government. The figures in this chapter relating to South Australia are in all cases exclusive of the Northern Territory.

The capital value of the incorporated districts is estimated at £39,663,150, and the annual value at £2,553,415. Adelaide, Port Adelaide, and Unley are the three largest corporations, and the following were their values for 1898-9, compared with those for 1891 :—

Corporation.	1891.		1898-9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Adelaide	392,819	3,928,190	425,826	4,258,260
Port Adelaide	78,177	781,770	101,003	1,010,030
Unley	79,061	790,610	109,792	1,097,720

The total receipts for 1898–9 were £336,540, the amount contributed by the Government as subsidy and grants being £101,727, while the rates collected were £136,185, leaving £98,628 from other sources. The expenditure was £336,408, the amount spent on works being £189,457, while salaries and office expenses absorbed £28,465, and miscellaneous services, £118,486.

The loans outstanding at the close of 1898–9 amounted to only £76,900. These loans were floated by the Adelaide City Council. The interest payable ranges from 3½ to 6 per cent., the average being 4·53 per cent.

The annual and capital values of all the incorporated districts for the past ten years are as shown in the following table :—

Year.	Annual Value.	Capital Value.
	£	£
1890	2,535,714	39,388,200
1891	2,543,526	39,509,540
1892	2,538,094	39,425,160
1893	2,561,806	39,793,490
1894	2,552,820	39,653,900
1895	2,494,326	38,745,300
1896	2,463,564	38,267,460
1897	2,485,995	38,615,890
1898	2,518,688	39,123,720
1899	2,553,415	39,663,150

Western Australia.

The great resources of this State have only been made manifest during recent years, and the limited population, compared with the vast area of the colony, has prevented any great extension of local government.

The first Municipalities Act was passed in 1871, but only a few districts were incorporated under it, and, in 1895, the existing Act became law, and a considerable increase in the area locally controlled has resulted from its provisions. The local bodies are termed Municipalities, Road Boards, and Health Boards.

The Municipal Act provides for the election of both councillors and Mayors by the ratepayers. With regard to Road Boards, however, the members are elected by the ratepayers, and the chairmen by the members.

The general rate imposed in municipalities must not exceed 1s. 6d. in the £ of annual value, and a special rate of 3d. in the £ may be levied under the Health Act. In the City of Perth, however, an additional rate is charged for water-supply ; this rate must not exceed 1s. in the £ of annual value. In the Road Board districts the general rate is limited to 1s. in the £ of annual value.

The total area of municipalities is only 64 square miles. The remainder of the State comprises 975,856 square miles, a large proportion of which is still under the central government. The Road Board districts occupy a considerable area, but as the general government exercises a certain amount of control over the expenditure, these districts cannot be said to be endowed with full local government.

The capital value for the latest available year was estimated at £9,702,000, and the annual value at £924,198. The corresponding figures for some of the most important towns are given below. The particulars for 1891 are not available, but it may be said generally that since 1895, the earliest year for which figures are obtainable, there has been a considerable increase both in the annual and capital values, as an inspection of the table will show :—

Municipality.	1895.		1898-9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Perth	95,852	798,767	268,972	2,241,430
Albany	26,013	225,791	28,674	249,340
Fremantle	71,579	550,608	149,006	1,146,200
,, North	*			
Coolgardie	21,570	269,625	101,083	550,500
Kalgoorlie	*		117,464	1,174,640

* Not incorporated.

The total receipts for 1898 amounted to £245,299, included in which is the sum of £95,569 given by the Central Government as subsidy and special allowances. The general rates received were £73,917, while the remainder, £75,813, represents collections from rents, license fees, &c., and proceeds of loans. The disbursements in the same year came to £275,993, of which the large proportion of £203,661 was spent on

works and improvements. The other important items are :—Salaries, £14,219 ; and interest on loans and overdrafts, £8,982 ; leaving £49,131 expended on other services, including £4,000 for the repayment of loans.

The total liabilities at the close of the year were £313,371, which include the loan of £80,000 floated by Perth, but not brought to account at date of closing. The principal item is outstanding loans, which amounted to £261,100 (inclusive of the £80,000 referred to above). The unsecured overdrafts amounted to £5,796, the balance £46,475, being due for amounts owing on contracts, outstanding accounts, &c. Against the loan indebtedness, however, must be placed the accumulated sinking fund, which amounts to £22,973.

The assets on the same date were estimated at £269,944. The largest proportion of this amount is accounted for by the value of landed property, plant, and furniture, which was stated to be £189,367. The outstanding rates amounted to £16,298 ; while other important items were :—Bank and cash balances, £34,290, and sinking fund, £22,973, leaving £7,016 for other assets.

Tasmania.

In this State, the city of Hobart was incorporated by a special Act in 1852, and in 1858 the Rural Municipalities Act was passed which provided for the establishment of corporations throughout the Colony. The whole area is not under the provisions of this Act alone, as there are other bodies, notably Town Boards and Road Trusts, which are authorised to control outlying districts.

In the urban municipalities—Hobart and Launceston—the aldermen are elected by the ratepayers, and the mayors by the aldermen. The ratepayers in the rural districts also elect their representatives, who are termed councillors, and the latter have the privilege of choosing their presiding officer, who is called warden.

The general rate in each class of corporation is limited to 1s. 6d. in the £ of the annual value, but special rates may be levied in rural districts, provided that the general and special rates together do not exceed 1s. 6d. in the £. Police and road rates may also be imposed in addition to municipal rates.

The area of municipal districts may be set down as 9,535 square miles, leaving 16,680 square miles under the control of the other local bodies, or of the central government. The total capital value at the close of 1898 was estimated at £28,332,000, and the annual value at £1,356,782. These figures may be somewhat over-stated, as the same property may be rated by more than one of the local authorities. The values of the two principal municipalities will be found below, and a reference to the corresponding particulars for 1891 will show that

Tasmania has not been very much affected by the depreciation of property, which was so severely felt in the Australian States :—

Municipality.	1891.		1898–9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Hobart....	174,950	2,915,833	175,485	2,924,750
Launceston...	135,168	2,252,800	125,498	2,091,630

The total receipts of Municipalities, Town Boards, and Road Trusts for 1898 were £146,792, the proportion contributed by the central government being only £12,281. The bulk of the collections consisted of rates, the amount of which was £89,225 ; and the remainder, £45,286, was accounted for by fees, licenses, proceeds of loans, &c. The total expenditure for the same year amounted to £147,012, but no details relating to this sum are available.

The total loans outstanding at the close of 1898 for the local bodies under review amounted to £512,402, and in the majority of cases sinking funds have been established for the extinction of the debts, the total amount accumulated at the end of 1898 being £46,290.

New Zealand.

In New Zealand an Act was passed in 1852 which divided the colony into six provinces, the local administration being vested in provincial councils. This system continued till 1876, when the provincial system was abolished, and the whole colony, except the area within the forty-one boroughs then existing, was subdivided into counties, each county having full control of its local affairs.

The provisions for election differ in the boroughs and counties ; as in the former bodies both the councillors and mayors are elected by "burgesses," but in counties, the councillors are elected by the "county electors," and the chairmen by the councillors. The rating powers are also different. In boroughs, the rates are in most cases levied on the annual value, and the general rate is limited to 1s. 3d. in the £. Special rates may also be imposed, but general and special rates together must not exceed 1s. 3d. in the £. In counties, and in a few of the boroughs (the latter having taken advantage of the "Rating on Unimproved Value Act of 1896"), the rates are charged on the capital value, and the general rate must not exceed three farthings in the £ in counties or boroughs where road boards or town districts exist, and six farthings

in other local areas. Separate rates may also be levied, provided the general and special rates do not exceed three farthings and six farthings in the £ respectively; and extra rates for special works, for interest and sinking funds on loans, and, where necessary for hospitals and charitable aid, may be charged.

In addition to the boroughs and counties, road districts and town districts have been proclaimed. The total area locally governed may be set down at 104,050 square miles, only 4,218 sqnare miles being outside the incorporated area.

The capital value for 1898–9 was estimated at £138,591,347, and the annual value at £6,427,000. The remarks with regard to the overstatement of the values in Tasmania may also be applied to New Zealand, as the boundaries of the various districts may overlap in some cases.

The distribution of the population of New Zealand differs from that of the other colonies. In the Australian States, especially those in the eastern portion of the continent, the great majority of the people are centred in the metropolitan areas, and consequently the capital and annual values are proportionately great in the chief cities and suburbs. In New Zealand, however, there are four large centres of population, and the values of the assessed properties are shown below. The figures for 1891 are also shown, and it will be noticed that the values have not varied to any great extent, as New Zealand, like Tasmania, did not experience the great depreciation which took place in some of the other States after the Bank reconstructions in 1893 :—

Borough.	1891.		1898–9.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Wellington	315,709	5,261,816	415,970	6,932,830
Auckland	297,468	4,956,800	319,200	5,320,000
Dunedin	251,870	4,197,833	235,024	3,917,066
Christchurch	195,251	3,254,183	206,826	3,447,100

The total receipts for 1898–9 amounted to £1,343,996, the Government contributions being £292,746, inclusive of loans. The collections from rates were £618,221, and from other sources £433,029, represented chiefly by fees for licenses and rents. The expenditure for the same period was £1,260,199, the amount spent on works being £682,680; on hospitals and charitable aid, £74,744; on management, £118,870; and on other services, £383,905. The contributions to sinking funds, and repayments of loans are not included in the total expenditure, and the amounts disbursed under these heads are not available.

The total loans outstanding at the close of 1898–9 for the bodies referred to amounted to £3,685,512, and the sinking fund was £335,739,

the net indebtedness, therefore, being £3,349,773. The annual charge for interest and sinking fund is approximately £220,733, the rates of interest ranging from 4 to 7 per cent.

Estimated by the annual value of its ratable property, Sydney is, and has been for many years, the second city of the British Empire; next comes Glasgow, and then Melbourne. None of the other Australasian cities ranks high on the list, but the extreme value of property in relation to population in the Australasian population centres as compared with the principal British cities, will be seen from the following table:—

Cities and Towns.	Population.	Annual Value.	
		Total.	Per Inhabitant.
Australasia—		£	£ s. d.
Sydney	438,300	4,995,200	11 7 11
Newcastle and suburbs	48,340	314,200	6 10 0
Melbourne	451,594	3,973,357	8 16 0
Ballarat and Ballarat East	38,448	235,130	6 2 4
Brisbane	110,950	1,061,109	9 11 4
Adelaide	149,672	1,149,328	7 13 7
Perth	34,610	321,606	9 5 10
Hobart	41,585	175,485	4 4 5
Wellington	47,862	449,355	9 7 9
United Kingdom—			
London (County)	4,232,118	36,574,812	8 12 10
Glasgow	731,675	4,352,181	5 19 0
Manchester (including Salford)	752,269	3,907,845	5 3 11
Liverpool	668,645	3,839,479	5 14 10
Edinburgh	261,225	2,555,756	9 15 8
Birmingham	510,343	2,297,543	4 10 0
Leeds	416,618	1,522,092	3 13 1
Bristol	320,000	1,461,419	4 11 4
Sheffield	356,478	1,268,893	3 11 2
Bradford	235,000	1,149,735	4 17 10
Newcastle-on-Tyne	223,021	1,129,743	5 1 4
Belfast	330,000	1,064,000	3 4 6
Nottingham	236,137	918,000	3 17 9
Hull	229,887	876,811	3 16 3

Boards and Trusts in New South Wales.

In addition to the municipalities, there are bodies known as Boards or Trusts whose function it is to construct and supervise certain works which have been established for the benefit of districts usually comprising one or more of the ordinary municipalities. These bodies are usually composed of members representing respectively the central overnment, the municipalities affected, and other persons directly

interested in the particular undertakings; and as a rule they raise the funds necessary for carrying out the works they control, by means of rates on the assessed value of the properties benefited, just as is the case in regard to municipalities.

In New South Wales there are the Metropolitan Board of Water Supply and Sewerage, having charge of the water supply, which it assumed in 1888, and of the sewerage system, which it has controlled since 1889, and the Hunter River District Board of Water Supply and Sewerage, formed in 1892. The Wollongong Harbour Trust, which was instituted in 1889, was the only one of the kind in the colony up to the year 1900—the works connected with shipping, and the improvements to navigation, at Sydney, Newcastle, and other ports, having always been carried out at the expense and under the supervision of the central Government. The Wollongong Trust, however, failed, and its powers have been assumed by the Government. During the year 1900, an Act was passed for the establishment of a Harbour Trust for the port of Sydney, and in the same year the Wharfs Resumption Act became law, which enabled the Government to acquire certain wharf properties in Darling Harbour; these wharfs, and others, originally the property of the Government, will be controlled by the Harbour Trust. There is a Metropolitan Fire Brigades Board, on which the municipalities within the metropolitan area are represented, and towards the annual expenses of which they contribute one-third. The fire insurance companies and the State are also represented, and contribute equally with the municipalities in maintaining the Fire Brigade Board. Thirty-two country boards have also been established under the Fire Brigades Act of 1884, three of which are, however, within the area administered by the Metropolitan Board, and contribute to its funds. There are Irrigation Trusts at Hay and Balranald. A similar trust at Wentworth has been taken over by the Government, and the dissolution of the Balranald trust is under consideration.

The Country Towns Water Supply and Sewerage Act of New South Wales was passed in 1880. Under the provisions of this measure municipalities outside the area under the control of the Metropolitan and Hunter District Water Supply and Sewerage Boards were entitled to construct, or to have constructed for them by the Government, works for water supply and sewerage, provided the construction of the same were approved by the Governor-in-Council, and the municipalities agreed to pay back the original cost of the works, with interest at the rate of 4 per cent. per annum. The Government were to pay the certified cost of the works, and the municipalities were to repay the Government by instalments extending over a period of sixty years. Under the operations of this Act twenty-one water-supply works have been carried out by the Government (exclusive of Richmond, now administered by the Metropolitan Board of Water Supply and Sewerage), and three by municipal councils, while works in nine other places were in course of construction on the 30th June, 1899, including additions to existing

works. The amount advanced by the Government to local bodies under the Act to the end of 1892 was £370,549, and instalments to the amount of £85,886 were then overdue. It was found that the liability of some of the municipal councils was too heavy for their resources, and in 1894 an amending Act was passed distributing the payments over 100 years and reducing the interest to 3½ per cent. On the 30th June, 1899, the total amount expended by Government, inclusive of interest, stood at £723,775, viz. : £538,008 for works completed under Government control; £27,344 for works carried out under the supervision of municipal councils; and £158,423 for works still in course of construction. Of the total amount of £565,352 due on account of completed works to the 30th June, 1899, £19,031 had been repaid, and £76,698 had been remitted by Government, leaving the debt at £469,623, which is repayable by annual instalments of £17,037.

Boards and Trusts in Victoria.

In Victoria the port of Melbourne is under the control of a Harbour Trust, which was established as far back as 1877. A Tramway Trust, representing twelve of the metropolitan municipalities, has been formed under the provisions of an Act passed in 1883. This body was entrusted with power to construct tramways through the streets of the municipalities interested, the requisite funds being raised by loans on the security of the tramways and the revenues of the municipal bodies connected with the undertaking. The trustees had the option either of working the tramways themselves or of leasing them to a private company. They adopted the latter alternative, and the tramways are being worked on a thirty-two years' lease, commencing from 1884. In 1891 the Melbourne and Metropolitan Board of Works was established for the purpose of constructing and supervising all works connected with water supply, sewerage, and drainage in Melbourne and suburbs. The Government is not directly represented on this Board, although to the Metropolitan Board of Water Supply in Sydney three members are nominated by the State. The reason for this difference is that in New South Wales the Government constructed the works and is responsible for the debt incurred in doing so, while in Victoria the Board carries out the work of construction, in addition to the maintenance and management to which the operations of the Sydney Board are confined. Throughout Victoria there are Water Works Trusts and Irrigation and Water Supply Trusts. During 1898-9 there were seventy-two Water Works Trusts and thirty-one Irrigation and Water Supply Trusts. The Government authorised an advance of £1,201,574 for the former service, and for the latter £1,440,080, and the amounts outstanding in June, 1899, were £852,885 and £1,093,128 respectively. As in New South Wales, the municipal bodies are represented on the Fire Brigade Boards, and bear a proportionate share of the expenses.

The Government of Victoria, prior to the establishment of the Trusts for Water Works, Irrigation, and Water Supply, advanced money from the Public Loans Account to local bodies requiring assistance to construct these works. The amount advanced for the development of the services to June, 1899, including arrears of interest capitalised, was £397,871, which has to be repaid into a sinking fund, or by annual instalments. The amount so repaid is £74,396. The figures just given are exclusive of the advances to the city of Ballarat for the water supply works, as these are now under a special commission. The outstanding debt of the Ballarat Water Commission on the 30th June, 1899, was £281,439. Under a special Act the Government have power to advance funds to shires for the construction of tramways, and £60,811 had been so advanced up to June, 1899. The Government, under two different Acts, can also make advances to shires for the purchase of rabbit-proof fencing. The amount so advanced to June, 1899, was £192,370, of which £57,656 was outstanding on that date.

Boards and Trusts in other Colonies.

In Queensland the water supply service forms part of the local government system; the works are proposed by the municipal bodies, but the Government constructs and supervises them, and when completed hands them over to the local authorities with their attendant liabilities. The latter form a debt to the State which is repaid in instalments. The total cost of construction to 31st December, 1898, was £1,050,099, and the amount due to the Government on the same date was £788,611.

In South Australia there are no Boards or Trusts of any importance beyond the municipal bodies already mentioned; extensive municipal powers exist, however, for the construction of important local works.

In Western Australia there are Road Boards, Local Boards of Health, and a Metropolitan Water Works Board.

In Tasmania seven Marine Boards, forming part of the local government system, have been established in different parts of the colony, and there are twelve Water Trusts in connection with municipal bodies. The rural police come under the local government system, the ratepayers who enjoy the benefits of police protection being obliged to bear the cost of administration. The control of the police is, however, under officers appointed by the central government.

In New Zealand there are, in addition to the ordinary forms of municipal government, River and Harbour Boards, which are established throughout the colony. The number of these at the end of 1898 was respectively twenty-eight and twenty-six. There is a Drainage Board at Christchurch, while there are twelve Land Drainage Boards and Water Supply Boards at Waimakariri and Manukau.

Complete returns of the Boards and Trusts in each colony are not readily obtainable; the following table, however, gives important details in connection with some of these bodies:—

Board or Trust.	Receipts.			Expenditure.	Outstanding Loans.
	Government.	Other.	Total.		
New South Wales—	£	£	£	£	£
Metropolitan Board of Water Supply and Sewerage	...	300,267	300,267	309,080	6,448,058
*Hunter District Water Supply and Sewerage	...	26,478	26,478	30,880	477,890
Victoria—					
Melbourne Harbour Trust	...	132,948	132,948	137,909	2,000,000
Melbourne and Metropolitan Board of Works	...	168,553	168,553	281,421	6,252,737
Melbourne Tramways Trust	...	426,234	426,234	369,068	1,650,000
Fire Brigade Boards	18,498	28,908	47,406	44,265	130,000
Water Works Trusts	...	...	...	...	852,885
Irrigation and Water Supply Trusts	...	...	...	...	1,093,128
Ballarat Water Commission	...	...	...	...	281,439
Queensland—					
Water Works	10,860	102,365	113,225	120,294	788,611
Western Australia—					
Road Boards	44,185	4,970	49,155	50,702	.....
Boards of Health	4,768	31,721	36,489	34,299	.. ...
Metropolitan Water Works Board.	14,708	19,097	33,805	37,322	367,829
Tasmania—					
Marine Boards	12,361	27,170	39,531	33,114	44,139
Light-houses	2,000	†6,841	8,841	10,605	.....
Water Trusts	...	5,345	5,345	4,680	51,700
Road Trusts	5,045	17,111	22,156	22,129	1,500
Town Boards	7,005	11,244	18,249	16,371	12,800
New Zealand—					
River Boards	...	17,724	17,724	14,825	42,320
Harbour Boards	6,342	493,902	500,244	471,576	3,804,187
Drainage Boards	90	25,061	25,151	26,119	200,000
Water Supply Boards	...	4,749	4,749	5,855	21,200

* Water supply only. † Including £1,284 from other Governments.

The amounts shown in the foregoing table under Road Trusts and Town Boards in Tasmania are included in the figures given on page 627. The outstanding loans for Tasmania are gross, sinking funds amounting to £6,340, £1,829, £302, and £1,340 respectively being established in connection with the debts of Marine Boards, Water Trusts, Road Trusts, and Town Boards. In New Zealand, also, sinking funds amounting to £8,063, £276,960, and £28,101 respectively exist in connection with the liabilities of River, Harbour, and Drainage Boards.

The outstanding loans of the Boards and Trusts of New South Wales constitute part of the public debt. This is true also with regard to the amounts for Victoria, except the loans of the Tramway Trust and

the Melbourne Harbour Trust, the Fire Brigades Boards, and part of the loans of the Melbourne and Metropolitan Board of Works, which are not guaranteed. The liabilities shown for Queensland and Western Australia also form part of the public debt of those colonies; but the amounts given for New Zealand are not advanced from the General Loan Account. In the foregoing table the advances made by the Governments to the borrowing bodies are included.

The total revenue of all local bodies is shown in the following table, the receipts from the various Governments being distinguished from the ordinary receipts :—

State.	Receipts from Government.	Other Receipts.	Total.
	£	£	£
New South Wales	81,022	1,033,966	1,114,988
Victoria	110,826	1,780,069	1,890,895
Queensland	126,890	473,562	600,452
South Australia	101,727	234,813	336,540
Western Australia	159,230	205,518	364,748
Tasmania	38,692	202,222	240,914
Commonwealth	618,387	3,930,150	4,548,537
New Zealand	299,178	1,592,686	1,891,864
Australasia	917,565	5,522,836	6,440,401

Indebtedness of Local Bodies.

The following table shows the total indebtedness of local bodies in each of the colonies for which returns are available. The figures include the liabilities to the Government. It must also be explained that the liabilities of Road Trusts and Town Boards in Tasmania have been included with municipalities :—

State.	Outstanding Loans.		
	Municipalities.	Boards, Trusts, &c.	Total for local purposes.
	£	£	£
New South Wales	2,736,703	6,925,948	9,662,651
Victoria	3,985,314	12,260,189	16,245,503
Queensland	984,739	788,611	1,773,350
South Australia	76,900	.....	76,900
Western Australia	261,100	367,829	628,929
Tasmania	512,402	110,139	622,541
Commonwealth	8,557,158	20,452,716	29,009,874
New Zealand	3,685,512	4,067,707	7,753,219
Australasia	12,242,670	24,520,423	36,763,093

For the amounts that have just been given the local bodies are responsible directly to their creditors in part, and the general governments hold themselves directly liable for the balance. In the following table is given a division of the indebtedness of local bodies into the sum due to the State and that due to the public. It may be mentioned that the amount owing to the State is included with the general debt of the colonies; and in order to estimate the total State and municipal indebtedness the figures in the second column only have to be added to those on page 798 :—

State.	Amount of Corporation Indebtedness included in the Public Debt.	Loans of Local Bodies floated in open market.	Total Indebte
	£	£	£
New South Wales	6,925,948	2,736,703	9,662,651
Victoria	5,035,659	11,209,844	16,245,503
Queensland	1,468,350	305,000	1,773,350
South Australia	.....	76,900	76,900
Western Australia.....	367,829	261,100	628,929
Tasmania	108,489	514,052	622,541
Commonwealth	13,906,275	15,103,599	29,009,874
New Zealand	789,965	6,963,254	7,753,219
Australasia	14,696,240	22,066,853	36,763,093

RAILWAYS.

TO the proper development of a country like Australasia, ill-supplied with navigable rivers, railway construction is absolutely essential. This has been recognised from an early period, and for the last forty years the Governments of the principal colonies have been fully alive to the importance of carrying on the work. For a long time, however, they were hampered in their efforts by the difficulty of borrowing money in London at a reasonable rate of interest; but since the year 1871 considerable progress has been made in the work of construction; indeed, by far the greater portion of the public debt of Australasia has been contracted for railway purposes. As the area of the seven colonies almost equals that of Europe or the United States of America, while the population numbers less than four and a half millions, it is almost needless to say that many of the lines run through districts very sparsely peopled. This is particularly the case in the colonies of Queensland, South Australia, and Western Australia, where there are vast tracts of territory in which little in the nature of permanent settlement has yet been accomplished, and in none of the colonies can it be said that the railway lines traverse thickly-settled areas. Indeed, if a fault may be found with the State policy pursued in the past, it is that in some cases expensive lines have been laid down in empty country the requirements of which could have been effectually met for many years to come by light and cheap lines, and that in consequence the railway administrators find themselves heavily burdened with a number of unprofitable lines. A few of these have been closed, but the vast majority are worked at a loss. Notwithstanding these drawbacks, however, the railways of the Commonwealth of Australia collectively yield a net return equal to 3·25 per cent., and those of Australasia 3·27 per cent. on the cost of construction.

History of Railway Construction.

An agitation for the introduction of the railway into the colony of New South Wales was afoot as early as 1846, and in August of that year it was decided at a public meeting held in Sydney to survey a line to connect the capital with Goulburn. But no decided step was taken towards construction until September, 1848, when the Sydney Railroad and Tramway Company was formed for the purpose of laying down a line between Sydney and Parramatta and Liverpool, to be afterwards extended to Bathurst and to Goulburn. The first sod was turned by the Hon. Mrs. Keith Stewart, daughter of Sir Charles Fitzroy, the Governor of the colony, on the 3rd July, 1850. Although started during a period of trade depression, when there was an abundant supply of

labour, the scheme was only well under weigh when the discovery of gold caused a stampede from the city, and the company was left without workmen to carry on the undertaking. Undeterred, however, by the difficulties into which the changing conditions of the country had plunged the Sydney Railroad and Tramway Company, private enterprise in 1853 essayed the further task of constructing a line between Newcastle and Maitland; but this project proved no more successful than the other, and in the following year the Government was forced to step in and carry out the schemes for which the two companies had been promoted. From that time the work of construction was vigorously pressed forward, and on the 26th September, 1855, the line from Sydney to Parramatta, 14 miles in length, was opened to traffic; and on the 11th April, 1857, Newcastle was connected with East Maitland. The extension to Goulburn of the Sydney line was completed on the 27th May, 1869.

While the Sydney Railroad and Tramway Company was trying to surmount the obstacles that had arisen in its path, the work of railway construction was begun in the neighbouring colony of Victoria, no fewer than three private companies being promoted in 1853 for that purpose. Material assistance in the shape of land grants and guarantee of interest was afforded by the Government; and on the 13th September, 1854, the first completed railway in Australasia, a line extending from Flinders-street, Melbourne, to Port Melbourne, was opened to traffic. It had been begun nearly three years after the line to connect Sydney with Parramatta, but was only 2½ miles long. No further mileage was brought into operation until May 13, 1857, when the Melbourne and Hobson's Bay Railway Company, which had constructed the first line, effected communication with St. Kilda; and on the 17th June of the same year a line from Williamstown to Geelong, 39 miles in length, which had been built by another company, was declared open. Meanwhile the Government of the colony had not remained inactive. In addition to assisting private enterprise with liberal concessions, it had taken over in 1855 an unfinished line started by the third of the companies referred to, and was carrying on the work of construction on its own account. By the year 1863 it had acquired all the lines in the colony with the exception of those owned by the Melbourne and Hobson's Bay Company, which were not purchased until the year 1878.

Although a line from Goolwa to Port Elliot, 6 miles in length, over which the locomotive now passes, was opened on the 18th May, 1854, it was at that time merely a horse tramway; and the first railway in South Australia was a line connecting the city with Port Adelaide, 7½ miles long, which was thrown open to traffic on the 21st April, 1856. The following year saw a railway constructed as far north as Gawler; while on the 1st October, 1889, a line from Palmerston to Pine Creek, in the Northern Territory, which had been built by the South Australian Government, was opened, the length being 145½ miles.

The northern colony of Queensland had enjoyed the privilege of self-government for several years when, early in 1864, a line to connect

Ipswich with Grandchester was commenced, and on the 31st July of the same year it was opened.

Although the Tasmanian Parliament granted a sum of £5,000 in 1863 for the survey of a line to connect Hobart with Launceston, the first railway in the island was one between Launceston and Deloraine, 45 miles in length, which was opened on the 10th February, 1871, having been commenced three years before. It was built by a private company, to whose capital, however, the Government had subscribed eight-ninths of the total amount of £450,000, on condition that the interest should be a first charge on the net receipts, and on the 3rd August, 1872, the line passed entirely into the ownership of the State. Communication between Hobart and Launceston was effected in 1876 by the completion of a line, connecting the southern city with Evandale Junction, which was constructed by an English company. The last of the colonies comprised in the Commonwealth to introduce the railway was Western Australia, where a line from the port of Geraldton to Northampton was begun during 1874 and opened in 1878. The commencement of railway construction in New Zealand was due to an agitation on the part of the settlers of Canterbury, who were desirous of facilitating communication between the city of Christchurch and the port of Lyttelton. The first portion of the line, as far as Ferrymead Junction, was brought into use on the 1st December, 1863.

The progress of railway construction, except, perhaps, in the colony of Victoria, was anything but rapid during the earlier years. This was in a great measure owing to the sparseness of the population and the natural fear that the return would not justify the expenditure which would have to be incurred in making wide extensions of the lines. It was also due, as previously pointed out, to the low estimation in which Australasian securities were held in London, and the consequent high rate of interest at which money for railway construction had to be borrowed. Since the year 1871, however, all the colonies have made satisfactory progress. In the following table will be found the length of line opened during each year, and the total mileage at the close of the working year :—

Year.	Miles opened.					
	Total.			During each year.		
	Commonwealth.	New Zealand.	Australasia.	Commonwealth.	New Zealand.	Australasia.
1854	2½	.....	2½	2½	.....	2½
1855	16½	.....	16½	14	.....	14
1856	32½	.....	32½	16	.....	16
1857	117	.....	117	84½	.....	84½
1858	132	.....	132	15	.....	15
1859	171	.....	171	39	.....	39
1860	215	.....	215	44	.....	44

Year.	Miles opened.					
	Total.			During each year.		
	Common-wealth.	New Zealand.	Australasia.	Common-wealth.	New Zealand.	Australasia.
1861	243	.....	243	28	.....	28
1862	373	.....	373	130	.....	130
1863	395	5	400	22	5	27
1864	469	5	474	74	.....	74
1865	490	5	495	21	.....	21
1866	519	5	524	29	.....	29
1867	711	7	718	192	2	194
1868	782	7	789	71	.....	71
1869	911	7	918	129	.....	129
1870	994	46	1,040	83	39	122
1871	1,030	105	1,135	36	59	95
1872	1,168	105	1,273	138	.....	138
1873	1,353	145	1,498	185	40	225
1874	1,491	209	1,700	138	64	202
1875	1,602	542	2,144	111	333	444
1876	1,961	718	2,679	359	176	535
1877	2,493	954	3,447	532	236	768
1878	2,906	1,070	3,976	413	116	529
1879	3,222	1,171	4,393	316	101	417
1880	3,675	1,258	4,933	453	87	540
1881	4,192	1,334	5,526	517	76	593
1882	4,704	1,465	6,169	512	131	643
1883	5,107	1,480	6,587	403	15	418
1884	5,855	1,570	7,425	748	90	838
1885	6,227	1,654	7,881	372	84	456
1886	6,859	1,810	8,669	632	156	788
1887	7,657	1,841	9,498	798	31	829
1888	8,365	1,865	10,230	708	24	732
1889	9,162	1,912	11,074	797	47	844
1890	9,757	1,956	11,713	595	44	639
1891	10,163	2,011	12,174	406	55	461
1892	10,394	2,011	12,405	231	.....	231
1893	10,688	2,108	12,796	294	97	391
1894	10,974	2,168	13,142	286	60	346
1895	11,600	2,190	13,790	626	22	648
1896	11,641	2,190	13,831	41	.....	41
1897	11,970	2,185	14,155	329	(—) 5	324
1898	12,170	2,222	14,392	200	37	237
1899	12,702	2,257	14,959	532	35	567
1900	12,995	2,271	15,266	293	14	307

It will be seen from the foregoing table that the lines opened in the Commonwealth and Australasia averaged 30 miles in length during each year from 1854 to 1861; from 1862 to 1871 the annual average was 82 miles in the Commonwealth and 89 in Australasia; from 1872

to 1881, 312 miles in the Commonwealth and 439 in Australasia; from 1882 to 1891, 597 miles in the Commonwealth and 665 in Australasia; and from 1892 to 1900, 314 miles in the Commonwealth and 343 in Australasia. It is now the established policy of each colony to keep the railways under State control, and only in exceptional circumstances is that policy departed from. Excluding coal, timber, and other lines which are not open to general traffic, there are within the Commonwealth only 490 miles of private lines, equal to but 3·77 per cent. of the total mileage open; and in Australasia only 657 miles, or 4·30 per cent. of the total mileage open. In Victoria the railways are entirely in the hands of the Government; while in Western Australia there are 277 miles of private lines, or 16·97 per cent. of the total mileage of the colony; in New South Wales, 85 miles; in Tasmania, 108 miles, and in South Australia, 20 miles. The private lines of New Zealand have a total length of 167 miles. A departure from the ordinary policy of the colony has also been made in Queensland, where the construction of the railway from Mareeba to Chillagoe, a distance of about 100 miles, has been undertaken by private persons, and the work is now in progress. Except in the case of Western Australia, none of these private railways are trunk lines, the most important of them being primarily intended to facilitate the development of important mines, and not for general traffic.

The divergence of the policy of Western Australia from that pursued by the other colonies was caused by the inability of the Government to construct lines when railway extension was urgently required in the interests of settlement. Private enterprise was therefore encouraged by liberal grants of land to undertake the work of construction; but the changing conditions of the colony have modified the State policy, and on the 1st January, 1897, the Government acquired the Great Southern Railway, 243 miles in length, one of the two trunk lines in private hands. This railway, which was owned by the West Australian Land Company, Limited, was built on the land-grant system, the State concession being 12,000 acres for every mile of line laid down, of which the original concessionaire retained 2,000 acres. The total price paid by the Government for the railway, with all the interests of the company and of the original concessionaire, was £1,100,000, of which £800,000 is set down as the capital sum on which the railway authorities are expected to provide interest, exclusive of the amount invested in rolling stock. The other trunk line is the Midland Railway, 277 miles in length, owned by the Midland Railway Company of Western Australia, Limited. In this case the land granted by the State was also 12,000 acres per mile of line. In 1891 the Government granted some slight assistance to the company, and in the following year guaranteed £500,000 of 4 per cent. debentures, the security being a first charge upon the railway and its equipment, and 2,400,000 acres selected land. At three months' notice, the State may foreclose should the company be indebted to it to the amount of £20,000.

The following statement shows the gauge and length of the private railways of Australasia :—

Line.	Gauge.	Length.
	ft. in.	miles.
New South Wales—		
Deniliquin-Moama	5 3	45
Cockburn-Broken Hill	3 6	36
Clyde-Rosehill	4 8½	3
Warwick Farm	4 8½	1
South Australia—		
Glenelg Railway Co.'s lines :		
Holdfast Bay	5 3	7
Victoria Square	5 3	7
Sidings, loops, &c.	5 3	6
Western Australia—		
Midland : Midland Junction-Walkaway Junction	3 6	277
Tasmania—		
Emu Bay-Mount Bischoff	3 6	80
Mount Lyell	3 6	21
Dundas-Zeehan	3 6	7
New Zealand—		
Wellington-Manawatu	3 6	84
Kaitangata-Stirling	3 6	4
Midland Railway	3 6	79

A proviso has been inserted in the charters of the companies owning the private lines in New South Wales, whereby after a certain date the Government can, if disposed, acquire the lines at a valuation. Similar conditions are found in most of the charters granted by the other colonies permitting the construction of private lines.

In the construction of railways during the last working year the colony of New South Wales displayed most activity. Of the 267 miles thrown open to traffic in Australasia during the twelve months ended 30th June, 1900, 64½ were opened in New South Wales, comprising the Tamworth to Manilla line, 29½ miles, and Moree to Gravesend, 35 miles.

The following table shows the extension of the railway in each colony since 1861 :—

State.	1861	1866	1871	1876	1881	1886	1891–2	1899–1900
New South Wales	73	143	358	554	1,040	1,941	2,266	2,896
Victoria	114	270	276	718	1,247	1,754	2,903	3,218
Queensland	*	50	218	298	800	1,433	2,320	2,801
South Australia	56	56	133	308	845	1,226	1,823	1,901
Western Australia	*	*	*	38	92	202	657	1,632
Tasmania	*	*	45	45	168	303	425	547
Commonwealth	243	519	1,030	1,961	4,192	6,859	10,394	12,995
New Zealand	*	5	105	718	1,334	1,810	2,011	2,271
Australasia	243	524	1,135	2,679	5,526	8,669	12,405	15,266

* Railways not in existence.

In 1883 a junction was effected between the New South Wales and Victorian lines at the river Murray; three years later direct communication was established between Victoria and South Australia; and in 1888 the last mile of line connecting Sydney with the northern colony of Queensland was completed, thus placing the four capitals, Brisbane, Sydney, Melbourne, and Adelaide, in direct communication with each other. A few years ago proposals were made to the Government of Western Australia to construct a railway upon the land-grant system, connecting the eastern districts of the colony with South Australia. It was proposed to extend the lines to Eucla, close to the South Australian border, and when that colony had extended its railways to the same point, Perth would be connected with all the capitals of the Australian colonies. In June, 1897, the South Australian Railways Commissioner, in a report to the Commissioner of Public Works, estimated the cost of construction and equipment of a line to the Western Australian border, a distance of 553 miles, at £1,903,000. When the railways of the two colonies shall have been connected, as they will possibly be at no far distant date, the European mails will, in all likelihood, be landed at Fremantle, and sent overland to all parts of the continent.

The following table shows the length of Government railways in course of construction and authorised on the 30th June, 1900:—

	Miles.
New South Wales	303
Victoria	74
Tasmania	48
Commonwealth	425
New Zealand	111
Australasia	536

Notwithstanding the energetic expansion of the railway systems throughout Australasia since 1871, there is still room for considerable extension. In the colony of South Australia construction is entirely confined to the south-eastern corner and to the extension of the Northern Line, which has its present terminus at Oodnadatta, 686 miles from Adelaide. It is proposed to eventually extend this line as far north as Pine Creek, the southern terminus of the Port Darwin line. In the course of the year 1896 offers were made on behalf of various syndicates for the construction of the Transcontinental railway, with the acquirement of the section from Palmerston to Pine Creek; but the Government was not prepared to recommend to Parliament the acceptance of any offer based on the land grant or guarantee system. When this railway is completed, direct overland communication will be established between the northern and southern portions of the continent. The length of the gap between the terminus at Oodnadatta and that at Pine Creek is 1,140 miles on the telegraph route.

In New South Wales the railway extensions will be chiefly confined to perfecting the various systems already constructed. At the present time several lines of what is termed the "pioneer" class are in course of construction in level pastoral country. These are of a light and cheap kind, on which the produce of the settlers may be conveyed to the trunk lines at a reasonable speed and at a cheaper rate than carriage by road. In Queensland, with its vast expanse of partly-settled territory and extensive seaboard, the railways are being constructed in separate systems. The lines commence from each of the principal ports and run inland, but there is no doubt that not many years will elapse before these systems will become branches of a main trunk-line which, in all likelihood, will be the Brisbane-Charleville line extended as far as Normanton at the Gulf of Carpentaria. In this colony a system has been introduced by which railways are constructed under a guarantee given by the local authority on behalf of the ratepayers of the district. Details of this system are given on a subsequent page. In Victoria, Tasmania, and New Zealand the railways are well developed compared with size of territory, and any future extensions will hardly be on so large a scale as in the other colonies. In Western Australia great activity now prevails in extending the lines to the gold-fields, and in the south-western portion of the colony in the interests of permanent settlement.

Control of State Railways.

The colonies of Victoria, South Australia, New South Wales, and Queensland have found it expedient to place the management and maintenance of railways under the control of commissioners. Victoria, in 1883, was the first colony to adopt this system; four years later South Australia made the change, while New South Wales and Queensland followed in 1888. Each of these colonies appointed three officials as commissioners, and conferred upon them large executive powers, amounting to almost independent control, the object aimed at being to obtain economical management of the lines free from political interference. Subsequently Queensland, Victoria, and South Australia reduced the number of commissioners to one; but in New South Wales, where the administration has been most successful, no changes in the system have been made. The control of the New Zealand railways was also handed over to a body of three commissioners in 1887; but at the beginning of 1895 the Government resumed charge of the lines, a general manager being responsible to a Minister for Railways.

In New South Wales and Victoria an additional safeguard in railway construction prevails. All proposals for new lines are submitted to a committee selected from Members of the Houses of Parliament. These committees take evidence regarding the suitability of the route proposed, the probable cost of construction, the financial prospects of the

line, and the grades to be adopted; and thereupon advise Parliament to adopt or reject the schemes proposed. This supervision of railway development may be said to have been attended with success, although lines that are not likely to be commercially successful have been recommended by the committee and sanctioned by Parliament.

Diversity of Gauge.

Unfortunately for intercolonial communication, railway construction in Australia has proceeded without uniformity of gauge, and the accomplishment of this work, which it is everywhere admitted must be secured, becomes more formidable to contemplate as the years roll on. In 1846 Mr. Gladstone advised that the 4-ft. 8½-in. gauge should be adopted for any lines constructed in New South Wales; and two years later this gauge was adopted as the standard by the Royal Commission appointed for the purpose of determining a uniform gauge for England and Scotland. In 1850, however, the Sydney Railroad and Tramway Company decided to adopt the 5-ft. 3-in. gauge, and in 1852 an Act was passed which provided that all railways in the colony should be laid down to that gauge. But in 1853 the company mentioned, having changed their engineer, altered their views on the gauge question, and applied to have the 4-ft. 8½-in. gauge substituted for the 5-ft. 3-in., succeeding in repealing the Act and in passing another which made the narrower gauge imperative. This step was taken without the concurrence of the other colonies, and feeling ran very high in Victoria in consequence, as two of the railway companies in that colony had already given large orders for rolling-stock on the 5-ft. 3-in. gauge. Until the lines of the two colonies met on the boundary no discomfort was, of course, experienced; out since then the break of gauge, with the consequent change of trains, has been a source of irritation and inconvenience. The South Australian Government adopted at the outset the 5-ft. 3-in. gauge of Victoria; but finding that the construction of lines of this gauge involved a heavier expense than they were prepared to face, the more recent lines were built on a gauge of 3 ft. 6 in. In that colony there are 507 miles laid to the 5-ft. 3-in. gauge, and 1,229¼ to that of 3-ft. 6-in., which is also the gauge of the 145½ miles of railway in the Northern Territory. The line joining Adelaide with the Victorian border, as well as several of the other trunk-lines, has been constructed on the wide gauge, so that the line from Melbourne to Adelaide is uniform. The private line which prolongs the South Australian system into New South Wales as far as Broken Hill is on the 3-ft. 6-in. gauge. All the Queensland lines are built on the gauge of 3 ft. 6 in., so that transhipment is necessary on the boundary between that colony and New South Wales. Tasmania, Western Australia, and New Zealand have adopted the 3-ft. 6-in. gauge. The first line laid down in Tasmania was on the 5-ft. 3-in. gauge, but it was soon altered to 3 ft. 6 in. On the west coast of that

island an experiment is being made in the construction of a 2-ft. gauge line, at one-fourth the cost of a line laid down to the Tasmanian standard gauge. The advisability of constructing lines of this class is also being considered in Victoria. The total length of line in Australasia laid down to a gauge of 5 ft. 3 in. is 3,725 miles; there are 2,811¼ miles on the 4-ft. 8½-in. gauge, and 8,072½ miles on the 3-ft. 6-in. gauge.

As far back as May, 1889, Mr. Eddy urged the Government of New South Wales to take action with the object of securing a uniform gauge for the colonies, and frequently since that date the Railway Commissioners have directed attention to the urgency of dealing with this important question before the colonies incur greater expenditure in railway construction. They have suggested that the settlement of the difficult question of the adoption of a standard gauge should be approached from the standpoint of which of the two gauges, 4 ft. 8½ in. and 5 ft. 3 in., can be adopted at the least cost and with the smallest amount of inconvenience to the country; and that the whole of the railways of New South Wales and Victoria, with that part of the South Australian lines laid to the 5-ft. 3-in. gauge, as well as the line to Cockburn, and all the lines in Queensland south of Brisbane leading to New South Wales, shall be altered to the standard, the cost of altering the railways and the rolling stock necessary to work them to be a national charge.

Comparison of Railway Facilities.

The population and area of territory per mile of line open vary considerably in the different colonies. In comparison with population, Western Australia, South Australia, and Queensland—the most extensive colonies—have the greatest mileage; but in proportion to the area of territory, Victoria, New Zealand, and Tasmania take the lead. The annexed table shows the relation of the railway mileage to population and to the area of each colony for the year 1899–1900 :—

State.	Per Mile of Line Open.	
	Population.	Area.
	No.	sq. miles.
New South Wales	468	107
Victoria	361	27
Queensland	172	238
South Australia*	194	475
Western Australia	105	598
Tasmania	333	48
Commonwealth	287	228
New Zealand	333	46
Australasia	293	201

* Including Northern Territory.

In the following table are given the average population and area of territory per mile of line open in the principal countries of the world. Of course a comparison can only be made fairly between Australasia nd other young countries in process of development :—

Countries.	Length of Railway.	Per Mile of Line Open.	
		Population.	Area.
	miles.	No.	sq. miles
United Kingdom	21,659	1,759	6
France	25,728	1,497	8
Germany	28,637	1,826	7
Austria-Hungary	20,536	2,014	12
Belgium	2,850	2,340	4
Netherlands	1,899	2,672	7
Switzerland	2,313	1,349	7
Sweden	6,350	797	27
Norway	1,213	1,787	103
Russia (exclusive of Finland)	28,244	3,670	69
Spain	8,020	2,190	25
Italy	9,592	3,321	12
India (inclusive of Native States)	22,491	12,766	69
Canada	16,870	307	217
Cape Colony	2,357	648	94
Argentine Republic	9,885	400	133
Brazil	8,718	1,044	368
Chili	2,662	1,019	109
United States of America	186,810	335	19
Commonwealth of Australia	12,995	287	228
Australasia	15,266	293	201

Cost of Construction.

At the close of the year 1899–1900, the cost of construction and equipment of the State railways completed and open to traffic in the Commonwealth was, in round figures, £122,000,000, or 62 per cent. of the public debts of the colonies composing it, after deducting sinking funds. The construction and equipment of the railways of Australasia

cost £138,000,000, or nearly 58 per cent. of the public debt of Australasia, after deducting sinking funds. To what extent the provinces have contributed to this expenditure will be apparent from the subjoined table, showing the total cost and the average per mile :—

State.	Year.	Length of line open.	Gauge.	Total cost of Construction and Equipment.	Average cost per mile.
		miles.	ft. in.	£	£
New South Wales	1900	2,811¼	4 8½	38,477,269	13,687
Victoria	,,	3,218	5 3	39,658,819	12,324
Queensland	,,	2,801	3 6	19,320,902	6,897
South Australia	,,	1,736¼	5 3 / 3 6	13,014,428	7,496
Northern Territory	,,	145½	3 6	1,155,267	7,940
Western Australia	,,	1,355	3 6	6,856,363	5,060
Tasmania	1899	437¾	3 6	3,604,222	8,233
Commonwealth	.....	12,504¾	.....	122,087,270	9,763
New Zealand	1900	2,104	3 6	16,703,887	7,939
Australasia	.....	14,608¾	.....	138,791,157	9,500

It will be seen that the lines which have been constructed most cheaply are those of Western Australia, where the average cost per mile has only been £5,060, as compared with an average of £9,763 for the Commonwealth and £9,500 for the whole of Australasia. In that colony there have been few engineering difficulties to contend with, and the lines laid down have been of a light kind. In New South Wales, the average cost, given as £13,687, has been somewhat reduced lately, in consequence of the construction of light "Pioneer" lines, built for an expenditure of £2,019 per mile. It is proposed by the Minister for Public Works to construct several new lines by day labour, as the Railway Construction Department has had a somewhat unfortunate experience in regard to claims for extras to contracts, and expensive litigation in resisting such claims. In Victoria the average cost has been reduced from £13,153 to £12,324 since 1891. At that date it was decided to apply the "butty-gang" system to the construction of railways in the colony, and to build all new country lines as cheaply as possible, and this has been strictly adhered to. Fairly substantial permanent-way has been laid down, with reduced ballast; unless they

have been absolutely necessary, fencing and gatehouses have been dispensed with; and only a skeleton equipment for stations and water supplies has been provided. As settlement progresses and traffic is developed, it is intended to raise these lines to the requisite standard of efficiency. In Queensland construction is now proceeding, in some cases, under a guarantee from the local authorities.

It would hardly be fair to institute a comparison between the cost of construction per mile in Australasia and in the densely-populated countries of Europe, for while in Europe the resumption of valuable ground is perhaps the heaviest expense in connection with the building of railways, in the colonies this item of expenditure is not of leading importance. The cost per mile in certain sparsely-settled countries is as follows :—

Canada	£11,624
Cape Colony	10,452
United States	11,626
Argentina	10,762
Mexico	9,417
Chili	14,463
Brazil	14,626

while for the Commonwealth of Australia it is £9,763, and for New Zealand £7,939.

Revenue and Working Expenses.

The avowed object of State railway construction in Australasia has been to promote settlement, apart from considerations of the profitable working of the lines; but at the same time the principle has been kept in view that in the main the railways should be self-supporting, and some of the colonies have, with more or less success, handed them over to Commissioners to be worked according to commercial principles, free from political interference. With the exception of South Australia, so far as the Palmerston-Pine Creek line in the Northern Territory is concerned, in all the colonies the revenue derived from the railway traffic exceeds the working expenses. During 1898-9 the colonies of New South Wales and Western Australia derived a profit from the working of the lines; and for the year ended 30th June, 1900, the colonies of South Australia proper and Western Australia were similarly favoured. Even in New South Wales, where the Commissioners have achieved most commendable results during the term of their administration, and claim to have at last made the lines self-supporting, there is still a deficiency for the year ended 30th June, 1900, when it is borne in mind that the average price received for the loans of the colony is but £96·48 per £100 of stock, and the interest payable is calculated accordingly. The net sum available to meet interest charges

during the last two working years will be found in the following table, showing the earnings and working expenses :—

State.	Working year, 1898–9.			Working year, 1899–1900.		
	Gross Earnings.	Working Expenses.	Net Earnings.	Gross Earnings.	Working Expenses.	Net Earnings.
	£	£	£	£	£	£
New South Wales	3,145,273	1,690,442	1,454,831	3,163,572	1,769,520	1,394,052
Victoria	2,873,729	1,797,726	1,076,003	3,025,162	1,902,540	1,122,622
Queensland	1,373,475	784,811	588,664	1,464,399	948,691	515,708
South Australia	1,058,397	617,380	441,017	1,166,987	657,841	509,146
Northern Territory	14,758	17,375	(—) 2,617	14,799	24,340	(—) 9,541
Western Australia	1,004,620	712,329	292,291	1,259,512	861,470	398,042
Tasmania*	178,180	141,179	37,001	193,158	152,798	40,360
Commonwealth	9,648,432	5,761,242	3,887,190	10,287,589	6,317,200	3,970,389
New Zealand†	1,469,665	929,738	539,927	1,623,891	1,052,358	571,533
Australasia	11,118,097	6,690,980	4,427,117	11,911,480	7,369,558	4,541,922

* Years ended 31st December, 1898 and 1899. † Years ended 31st March, 1899 and 1900.
(—) Denotes deficiency in amount available to meet working expenses.

The proportion of gross earnings absorbed by working expenses during each of the last five years will be found below :—

State.	Percentage of Gross Earnings absorbed by Working Expenses.				
	1895–6.	1896–7.	1897–8.	1898–9.	1899–1900.
New South Wales	55·02	53·11	53·34	53·75	55·93
Victoria	64·39	59·77	66·92	62·55	62·89
Queensland	59·36	58·01	56·43	57·14	64·78
South Australia	59·10	59·92	61·31	58·33	56·37
Northern Territory	101·22	105·91	143·50	117·73	164·47
Western Australia	49·79	63·09	77·11	70·91	68·40
Tasmania*	80·42	74·98	77·04	79·23	79·10
Commonwealth	59·17	58·02	60·70	59·71	61·46
New Zealand†	63·51	61·35	62·30	63·26	64·80
Australasia	59·71	58·44	60·91	60·18	61·94

* Years ended 31st December, 1895–9. † Years ended 31st March, 1896–1900.

It will be seen from this table that the percentage of working expenses for the colonies comprised in the Commonwealth has increased from 59·17 to 61·46 in the course of the five years; the increase for Australasia as a whole being from 59·71 to 61·94. In Victoria the working expenses during the period decreased 1·5 per cent.; in South Australia proper, 2·73 per cent.; and in Tasmania, 1·32 per cent. The

increase manifested by New South Wales was 0·91 per cent.; Queensland, 5·42 per cent.; Northern Territory of South Australia, 63·25 per cent.; Western Australia, 18·61 per cent.; and New Zealand, 1·29 per cent. At the present time the proportion of gross earnings absorbed by working expenses is smallest in New South Wales, and, setting aside the Northern Territory railway, highest in Tasmania.

Interest returned on Capital.

In establishing the financial results of the working of the lines, it is the practice of the railway authorities to compare the net returns with the nominal rate of interest payable on the railway loans outstanding, ignoring the fact that many loans were floated below par and that the nominal is not the actual rate of interest. A true comparison, of course, is afforded by taking the rate of interest payable on the actual sum obtained by the State for its outstanding loans. This information is not obtainable for New Zealand; but for the other colonies it is to be understood that the figures in the second column of the following table represent the actual rate of interest payable, ascertained in the manner last described. On this basis, the only colonies whose lines paid their way during the year ended 30th June, 1900, were Western Australia, where the activity in gold-mining has resulted in a net profit of 2·35 per cent. on the railway lines of the colony after defraying the interest charge on the capital expenditure, and South Australia proper where the net profit was 0·04 per cent. In New South Wales, where the Commissioners have announced a profit after paying interest on the invested capital, there is still a deficiency of 0·14 per cent., but it may be expected that this will be extinguished at an early date:—

State.	Interest returned on Capital.	Actual rate of Interest payable on outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
New South Wales	3·62	3·76	0·14
Victoria	2·83	3·95	1·12
Queensland	2·67	4·01	1·34
South Australia	3·91	3·87	*0·04
Northern Territory	(—) 0·82	4·09	4·91
Western Australia	5·81	3·46	*2·35
Tasmania	1·12	3·80	2·68
Commonwealth	3·25	3·85	0·60
New Zealand	3·42	3·79	0·37
Australasia	3·27	3·84	0·57

* Average gain.

The rate of return on capital which is shown in the foregoing table represents the interest on the gross cost of the lines. In some cases the nominal amount of outstanding debentures is less than the actual expenditure on construction and equipment, owing to the fact that some loans have been redeemed; but as the redemption has been effected by means of fresh loans charged to general services, or by payments from the general revenue, and not out of railway earnings, no allowance on this account can reasonably be claimed.

The table given below shows the rate of interest returned on the capital expenditure for each of the last five years, with the sum which such return falls short of the actual rate of interest payable on cost of construction. In the case of New Zealand, only the nominal loss is shown; the actual loss was somewhat higher :—

State.	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
INTEREST RETURNED ON CAPITAL EXPENDITURE.					
New South Wales	3·44	3·78	3·74	3·83	3·62
Victoria	2·24	2·74	2·49	2·75	2·83
Queensland	2·63	2·37	2·92	3·15	2·67
South Australia	3·21	3·26	2·98	3·42	3·91
Northern Territory	(—)0·02	(—)0·09	(—)0·53	(—)0·22	(—)0·82
Western Australia	11·48	9·05	4·62	4·55	5·81
Tasmania*	0·83	1·16	1·09	1·03	1·12
Commonwealth	3·01	3·36	3·11	3·31	3·25
New Zealand	2·80	3·19	3·24	3·29	3·42
Australasia	2·98	3·34	3·12	3·31	3·27
NET LOSS IN WORKING LINES.					
New South Wales	0·42	0·03	0·05	†0·05	0·14
Victoria	1·84	1·26	1·50	1·20	1·12
Queensland	1·40	1·16	1·11	0·88	1·34
South Australia	0·91	0·79	1·05	0·53	†0·04
Northern Territory	4·14	4·14	4·56	4·17	4·91
Western Australia	†7·64	†5·45	†1·03	†1·01	†2·35
Tasmania*	3·05	2·71	2·75	2·79	2·68
Commonwealth	1·01	0·61	0·80	0·57	0·60
New Zealand	1.14	0·73	0·65	0·52	0·37
Australasia	1·03	0·63	0·80	0·57	0·57

* Years 1895 to 1899. † Net profit.

In 1881 the New South Wales railways yielded 5·31 per cent.—a higher rate of interest on the capital cost than was ever reached before or since. In the same year the Victorian lines yielded a return of 4·04 per cent., which is the highest on record in that colony, with the exception of 4·18 in the year 1886. The decline in the net profits was largely due to the extension of the lines in sparsely-populated districts; but with the adoption of a more prudent policy in the matter of construction, largely dictated by the severe financial pressure to which the colonies were subjected, and with more careful working, the returns, as will be evident from the foregoing table, are again showing improvement.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per average mile worked during the last two years were as follow :—

State.	Gross Earnings.		Expenditure.		Net Earnings.	
	1898-9.	1899-1900.	1898-9.	1899-1900.	1898-9.	1899-1900.
	£	£	£	£	£	£
New South Wales..	1,163	1,153	625	645	538	508
Victoria	920	949	576	597	344	352
Queensland	506	523	289	339	217	184
South Australia ...	614	674	358	380	256	294
Northern Territory	102	102	119	167	(—) 17	(—) 65
Western Australia.	791	930	561	636	230	294
Tasmania*	400	434	317	343	83	91
Commonwealth	796	827	468	508	328	319
New Zealand	712	774	450	501	262	273
Australasia...	784	819	466	507	318	312

1898 and 1899

For the colonies comprised in the Commonwealth the gross earnings per average mile worked during 1899–1900 were £31 more than in the previous year, and the working expenses were increased by £40, leaving the net earnings at £319 in 1899–1900, as compared with £328 in 1898–9. For the whole of Australasia the gross earnings per average mile worked during 1899–1900 were £35 more than in the previous year, and the working expenses were increased by £41, leaving the net earnings at £312 in 1899–1900 as against £318 in 1898–9. Below will be found a table giving the returns per train mile. In all the colonies there was an increase in the train mileage

run during 1899–1900. The increase in Western Australia was nearly a million miles :—

State.	Gross Earnings.		Expenditure.		Net Earnings.	
	1898–9.	1899–1900.	1898–9.	1899–1900.	1898–9.	1899–1900.
	d.	d.	d.	d.	d.	d.
New South Wales..	85·72	85·36	46·07	47·75	39·65	37·61
Victoria	71·00	71·83	44·41	45·17	26·59	26·66
Queensland	56·62	54·69	32·35	35·43	24·27	19·26
South Australia ...	65·14	67·02	38·00	37·78	27·14	29·24
Northern Territory	115·53	114·53	136·02	188·37	(–)20·49	(–)73·84
Western Australia.	74·01	71·70	52·48	49·04	21·53	22·66
Tasmania*.....	56·17	57·50	44·50	45·49	11·67	12·01
Commonwealth	71·71	71·23	42·81	43·74	28·90	27·49
New Zealand.....	89·00	93·00	56·22	60·31	32·78	32·69
Australasia ...	73·92	73·58	44·28	45·52	29·64	28·06

* 1898 and 1899.

Financial Results of Foreign Railways.

The interest on capital cost, the proportion of working expenses to the gross revenue, and the returns per train mile for the railways of some of the principal countries of the world are given below. The figures for the countries other than Australasia refer either to the year 1898 or 1897 :—

Country.	Capital Cost.			Working Expenses : Proportion to Gross Revenue.	Per Train Mile.		
	Total.	Per Mile Open.	Return Per Cent.		Gross Revenue.	Working Expenses.	Net Revenue.
	£	£	p. cent.	per cent.	d.	d.	d.
United Kingdom	1,134,468,462	52,378	3·55	58·14	60·7	35·3	25·4
France	635,920,000	27,726	4·30	52·08	68·3	35·6	32·7
Germany	580,187,000	20,260	6·06	55·68	75·9	41·8	34·1
Belgium	59,526,012	29,886	5·71	60·06	56·7	34·0	22·7
United States	2,089,407,000	11,626	4·32	61·44	65·5	47·0	18·5
Canada	196,103,549	11,624	2·19	65·54	57·2	38·4	18·8
Cape Colony	20,800,212	10,452	4·63	65·53	84·3	55·2	29·1
Commonwealth of Australia	122,087,270	9,763	3·25	61·40	71·2	43·7	27·5
Australasia	138,791,157	9,500	3·27	61·87	73·5	45·5	28·0

The figures given above for the Cape Colony are for State lines only, and the return on the invested capital is exclusive of the share of the Orange Free State in the profits.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the various colonies during the years 1881, 1891–2, and 1899–1900. It will be seen that during the last few years the number of journeys on the Victorian lines has fallen off enormously, although the traffic has again taken an upward movement. Nearly all the colonies, however, experienced the effects of the diminished spending power of the people; but in the majority of cases a recovery has taken place. The number of passenger journeys in Tasmania in 1899 was still small compared with the 1891 returns:—

State.	Passengers carried.		
	1881.	1891–2.	1899-1900.
New South Wales	6,907,312	19,918,916	26,486,873
Victoria	18,964,214	55,148,122	49,332,899
Queensland*	247,284	2,370,219	4,395,841
South Australia	3,032,714	5,744,487	7,416,506
Northern Territory	No lines	4,541	3,374
Western Australia	67,144	456,631	6,225,068
Tasmania	102,495	704,531	640,587
Commonwealth	29,321,163	84,347,447	94,501,148
New Zealand	2,911,477	3,555,764	5,468,284
Australasia	32,232,640	87,903,211	99,969,432

* Exclusive of journeys of season ticket-holders.

The amount of goods tonnage is shown in the subjoined table. In the period from 1881 to 1891 there was an increase of about 102 per cent., varying from 44 per cent. in New Zealand to 747 per cent. in Tasmania. Since the latter year the tonnage has increased by 43 per cent.:—

State.	1881.	1891-2.	1899-1900.
	tons.	tons.	tons.
New South Wales	2,033,850	4,296,713	5,531,511
Victoria	1,366,603	2,720,886	2,998,303
Queensland	161,008	768,527	1,688,635
South Australia	646,625	1,337,859	1,485,976
Northern Territory	No lines.	2,633	3,009
Western Australia	27,816	135,890	1,384,040
Tasmania	21,043	178,224	312,446
Commonwealth	4,256,945	9,440,732	13,403,920
New Zealand	1,437,714	2,066,791	3,127,874
Australasia	5,694,659	11,507,523	16,531,794

The percentage of receipts from coaching traffic to the total receipts is somewhat less in the Australasian colonies than in the United Kingdom, where for the year 1899 the coaching receipts formed 45·63 per cent. of the total obtained from goods and passenger traffic. The figures for each colony are given below :—

State.	Coaching Traffic.	Goods Traffic.
	per cent.	per cent.
New South Wales	38·80	61·20
Victoria	48·59	51·41
Queensland	34·52	65·48
South Australia	29·73	70·27
Northern Territory	26·98	73·02
Western Australia	27·90	72·10
Tasmania	40·46	59·54
Commonwealth	38·78	61·22
New Zealand	32·51	67·49
Australasia	38·00	62·00

AVERAGE WEIGHT OF TRAIN LOAD.

The useful comparisons that may be made between the railway systems of the various colonies are very limited, and greater uniformity in the presentation of the railway reports is extremely desirable in view of the provisions in the Commonwealth Act for the possible control of the railway systems by the central government. An example of want of uniformity in an important particular is the absence of information which would enable the average train load to be ascertained. This information can only be given for two States—South Australia and New South Wales—and for the latter colony in a perfect manner for one year only. The figures for South Australia show a decided increase in the average weight during the last five years. The figures quoted do not include the business of the Northern Territory :—

Year.	Goods mileage.	Ton mileage.	Average weight of train.
			tons.
1896	2,089,911	134,846,696	64·52
1897	2,265,277	159,454,588	70·34
1898	2,273,537	157,143,651	69·11
1899	2,426,477	191,041,569	78·73
1900	2,569,958	197,079,956	76·68

The average tonnage for goods trains is, therefore, 72 tons, which is 4 tons higher than in New South Wales, the only other system with which a comparison can be made. The New South Wales figures, with the exception of those for the year 1900, are unsatisfactory, inasmuch as the goods mileage relates to the year ended 30th June, while the ton mileage is for the year ending 31st December following. No figures can be quoted for 1899 :—

Year.	Goods mileage.	Ton mileage.	Average weight of train.
			tons.
1896	4,001,164	255,621,932	63·9
1897	4,244,385	273,400,624	64·4
1898	4,260,368	314,996,969	73·9
1900	4,610,343	320,364,852	69·5

The average for the period was 68 tons. The figures for New South Wales and for South Australia compare very favourably with the returns of the British railways, but are very far behind those of some of the great American lines, as the following figures show :—

British Railways, 1900.

Company.	Goods mileage.	Ton mileage.	Average weight of train.
			tons.
Lond. North-Western	22,668,940	1,311,000,000	57
Midland	27,270,791	1,377,000,000	50
Great Western	23,096,578	1,056,000,000	46
North-Eastern	17,565,768	1,055,000,000	60
Great Northern	12,027,759	534,000,000	44½
Lancashire and Yorkshire	6,681,695	450,000,000	67
Great Eastern	8,564,851	322,000,000	37½
Great Central.....	8,328,551	360,000,000	43
Total	126,204,933	6,465,000,000	51

The New York Central shows to great advantage compared with the British lines ; the average weight of train for the years quoted was :—

	tons.
1894	249
1895	252
1896	268
1897	270
1898	299
1899	322

Rolling Stock.

The following table gives the different classes of rolling stock in the possession of the several Australasian Governments at the end of the year 1899–1900, and, considerable as are the numbers of each class, they could with advantage be largely increased in most of the colonies :—

State.	Engines.	Coaching Stock.	Goods Stock.
New South Wales	489	1,025	9,880
Victoria	522	1,436	9,317
Queensland	335	388	6,141
South Australia	347	407	6,154
Northern Territory	6	7	134
Western Australia	233	260	4,777
Tasmania	67	218	1,125
Commonwealth	1,999	3,741	37,528
New Zealand	304	577	10,295
Australasia	2,303	4,318	47,823

Railway Accidents.

The persons meeting with accidents on railway lines may be grouped under three heads—passengers, servants of the railways, and trespassers ; and the accidents themselves might be classified into those arising from causes beyond the control of the person injured, and those due to misconduct or want of caution. The following table shows the number of persons killed and injured on the Government railways during 1899–1900 in those colonies for which returns are available :—

State.	Passengers.		Railway Employés.		Trespassers, &c.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales	5	44	18	181	13	30	36	255
Victoria	2	129	9	336	27	73	38	538
South Australia	1	.....	5	27	4	3	10	30
Northern Territory*	...	.....	...	.....	...	.....	...	.....
New Zealand	2	18	8	237	6	66	16	321

* No accidents.

The railways of Australasia have been as free from accidents of a serious character as the lines of most other countries. In order to obtain a common basis of comparison it is usual to find the proportion

which the number of persons killed or injured bears to the total passengers carried. There is, however, no necessary connection between the two, for it is obvious that accidents may occur on lines chiefly devoted to goods traffic, and a more reasonable basis would be the accidents to passengers only compared with the number of passengers carried. The data from which such a comparison could be made are wanting for some countries. As far as the figures can be given they are shown in the following table, which exhibits the number of passengers killed and injured per million carried. The figures are calculated over a period of ten years and brought down to the latest available dates :—

Country.	Number of Passengers.		Average per million passengers carried.	
	Killed.	Injured.	Killed.	Injured.
Germany	470	1,906	0·1	0·4
Austria-Hungary	104	1,280	0·1	1·4
Belgium	127	1,209	0·1	1·3
Sweden	18	29	0·1	0·2
France	653	3,207	0·2	1·1
Norway	6	5	0·1	0·1
Holland	21	92	0·1	0·4
Switzerland	168	582	0·4	1·5
Russia	403	1,532	0·8	3·1
United Kingdom	1,173	14,280	0·1	1·6
Spain	140	858	0·6	3·4
Canada	145	700	1·1	5·1
New South Wales	74	444	0·3	2·1
Victoria	29	1,165	0·1	2·5
South Australia	13	24	0·2	0·4
New Zealand	39	170	1·0	4·2

New South Wales.

The progress of railway construction during the twenty years which followed the opening of the first line was very slow, for in 1875 the length of line in operation had only reached 435 miles. From 1876 to 1889, greater activity prevailed, no less than 1,748 miles being constructed during this period, but this rate of increase was not continued, inasmuch as only 14 miles were opened during the next three years. Subsequently there was renewed activity, and the length of line opened to 30th June, 1900, was 2,811¼ miles, the amount expended thereon for construction and equipment being £38,477,269, or at the rate of £13,687 per mile.

The railways of the colony are divided into three branches, each representing a system of its own. The southern system, which is the most important, serving as it does the richest and most thickly

populated districts, and placing Sydney, Melbourne, and Adelaide in direct communication, has several offshoots. From Culcairn, a line connects with Corowa on the Murray River; from Junee a branch extends as far as the town of Hay in one direction, and Finley in another, and places the important district of Riverina in direct communication with Sydney. From Cootamundra a line branches off in a southerly direction to Gundagai, and another in a north-westerly direction to Temora; while from Murrumburrah a line has been constructed to Blayney, on the western line, thus connecting the southern and western systems of the colony. Nearer the metropolis, the important town of Goulburn is connected with Cooma, bringing the rich pastoral district of Monaro into direct communication with Sydney. Another line that forms part of the southern system has been constructed to Nowra, connecting the metropolis with the coastal district of Illawarra, which is rich alike in coal and in the produce of agriculture. The western system of railways extends from Sydney over the Blue Mountains, and has its terminus at Bourke, a distance of 503 miles from the metropolis. Leaving the mountains, the western line, after throwing out a branch from Wallerawang to Mudgee, enters the Bathurst Plains, and connects with the metropolis the rich agricultural lands of the Bathurst, Orange, and Wellington districts. Beyond Dubbo it enters the pastoral country. At Blayney, as before stated, the western line is connected with the southern system by a branch line to Murrumburrah; at Orange a branch connects that town with Forbes on the Lachlan River, and from Parkes, one of the stations on this branch line, an extension to Condobolin on the Lachlan River has been constructed. Further west, on the main line at Nevertire, a short line extends to the town of Warren, and at Nyngan a branch line connects the important mining district of Cobar with Sydney. The western system also includes a short line from Blacktown to Richmond on the Hawkesbury River, and branch lines are in course of construction from Dubbo to Coonamble, and from Byrock to Brewarrina. The northern system originally commenced at Newcastle, but a connecting line has been constructed, making Sydney the head of the whole of the railway systems of the colony. This connecting line permits of direct communication between Adelaide, Melbourne, Sydney, and Brisbane, a distance from end to end of 1,808 miles, or altogether between the terminus of Oodnadatta, in South Australia, and Cunnamulla, in Queensland, there is one continuous line of railway, 3,100 miles in length. The northern system comprises a branch from Werris Creek to Gravesend, which is now being extended to Inverell, thus placing the Namoi and Gwydir districts in direct communication with the ports of Newcastle and Sydney. A portion of the North Coast railway has also been constructed from Murwillumbah, on the Tweed River, to Lismore on the Richmond River. A short line branches off the main northern line at Hornsby, and connects with the north shore of Port Jackson at Milson's Point.

Up to October, 1888, the control of the railways was vested in the Minister for Works, the direct management being undertaken by an officer under the title of Commissioner. It was, however, recognised that political influence entered unduly into the management of this large public asset, and, as a consequence, the "Government Railways Act of 1888" was passed, with the object of removing the control and management of the railways from the political arena, and vesting them in three railway Commissioners, who were required to prepare for presentation to Parliament an annual report of their proceedings, and an account of all moneys received and expended during the preceding year. While the avowed object of state railway construction has been to promote settlement apart from consideration of the profitable working of the lines, still the principle has been kept in view that in the main the railways should be self-supporting. It will be seen, from the subsequent pages, that the present management, despite the fact that they are hampered by a large number of unprofitable lines, have succeeded in placing the railways of the colony in a satisfactory financial position.

Revenue and Working Expenses.

The net sum available to meet interest charges during the last decennial period is set forth in the following table, and the returns show that the Commissioners have achieved most important results during their term of administration, and may reasonably claim to have at last made the lines almost self-supporting, as there is only a matter of £54,000 between the net earnings and the interest charge :—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	Per cent.
1891	2,974,421	1,831,371	1,143,050	61·57
1892	3,107,296	1,914,252	1,193,044	61·60
1893	2,927,056	1,738,516	1,188,540	59·39
1894	2,813,541	1,591,842	1,221,699	56·58
1895	2,878,204	1,567,589	1,310,615	54·46
1896	2,820,417	1,551,888	1,268,529	55·02
1897	3,014,742	1,601,218	1,413,524	53·11
1898	3,026,748	1,614,605	1,412,143	53·34
1899	3,145,273	1,690,442	1,454,831	53·75
1900	3,163,572	1,769,520	1,394,052	55·93

In the foregoing table will be found ample evidence of the economical working of the State railways under their present management, inasmuch as the net earnings for the financial year ended 30th June, 1900, were 44·07 per cent. of the total earnings, as against 33·31 per cent. when the Commissioners took office. The net earnings, exhibited in the last

year of the table, are a considerable improvement on those shown for the first year. The financial depression of 1893, which brought about a considerable change in the character of the coaching traffic, and the continued unfavourable character of the seasons, greatly affected the earnings of several years; the fall in earnings, however, was met by a reduction in working expenses, so that the financial result of the railway management was not greatly affected. The year 1900 compares somewhat unfavourably with the three years immediately preceding. This is due to the fact that, notwithstanding a much larger tonnage carried, the merchandise and live stock traffic show a decrease in freight earned, clearly indicating that the traffic from these sources has been carried at less profitable rates than hitherto. The traffic in wool and hay also showed a large falling off, and it appears very probable that owing to the serious droughts of the past years and the consequent enormous loss of sheep, no material increase in this traffic may be expected in the immediate future. The outlook with regard to grain and agricultural products, mineral and general traffic, is more encouraging than it has been for years, and it is anticipated that the revenue will be maintained. No reduction in the percentage of expenditure to earnings is practicable, inasmuch as the Commissioners will have to provide for concessions in connection with the carriage of starving stock, and for the renewal of a number of old engines and the carrying out of extensive repairs on others, as well as for the replacing of a large mileage of iron rails on the main northern line by steel. The proportion of working expenses to earnings is less in New South Wales than in any other part of Australia, as the following figures, which are the average of the five years 1896–1900, will show:—

New South Wales	54·23
Victoria	63·30
Queensland	59·14
South Australia	59·01
Western Australia	65·86
Tasmania	78·15
New Zealand	63·04

Interest returned on Capital.

In establishing the financial results of the working of the lines it is the practice of railway authorities to compare the net returns with the nominal rate of interest payable on the railway loans or on the public debt of the colony. An accurate comparison can only be made by taking the average rate of interest payable on the actual sum obtained by the State for its outstanding loans. On this basis, the lines of the colony have met the interest on construction and equipment during four years only, viz., 1881, 1882, 1883, and 1899. In 1899 the lines

yielded a net sum of £19,000 after paying working expenses, interest, and all charges, and 1900 only fell short of this desirable condition by £54,000. The following table, covering a term of ten years, indicates the average loss for each year during the period :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1891	3·60	3·81	0·21
1892	3·58	3·82	0·24
1893	3·48	3·96	0·48
1894	3·46	3·97	0·51
1895	3·58	3·94	0·36
1896	3·44	3·86	0·42
1897	3·78	3·81	0·03
1898	3·74	3·79	0·05
1899	3·83	3·78	*0·05
1900	3·62	3·76	0·14

* Average gain.

A factor in the fluctuation of the profits is found in the extension of the lines in sparsely-populated districts ; but with the adoption of a more prudent policy in the matter of construction largely dictated by the severe financial pressure to which the colony has been subjected, and with careful working, the returns are showing improvement. As showing the handicap against which the railway management has to struggle, it is worth noting that there are sixteen branch lines on which about eleven millions and a half sterling have been expended which do not pay their way, the loss on these lines being about £250,000 per annum.

Earnings and Expenses per Mile.

Two important facts which demonstrate the financial position of the railways and the character of the management are the earnings per train mile and per average mile open. Although the returns now being realised cannot be compared with those of 1875, when the net earnings per train mile fell little short of 52d., and per mile open of £775, the present earnings are in every way encouraging. Under the control of the Commissioners the net return per train mile has increased from 27·4d. to 37·6d., or 37·2 per cent. ; while per mile of line open for traffic

the advance has been from £374 to £508, or 35·8 per cent. The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table :—

Year.	Gross Earnings per average mile open.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1891	84·88	52·26	32·62
1892	89·25	54·98	34·27
1893	93·60	55·59	38·01
1894	94·18	53·29	40·89
1895	90·96	49·54	41·42
1896	87·68	48·24	39·44
1897	88·99	47·26	41·73
1898	87·10	46·46	40·64
1899	85·72	46·07	39·65
1900	85·36	47·75	37·61

The gross earnings, expenditure, and net earnings per average mile open for the past ten years, were as follow :—

Year.	Gross Earnings per train mile.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	1,363	839	524
1892	1,423	877	546
1893	1,264	750	514
1894	1,159	656	503
1895	1,144	623	521
1896	1,114	613	501
1897	1,171	622	549
1898	1,138	607	531
1899	1,163	625	538
1900	1,153	645	508

In many cases the railways of the colony pass through heavy and mountainous country, involving steep gradients. For the more expeditious and economical working of the traffic, important deviations have been and are being carried out to secure better grades and to ease the curves. While much has been done in this direction, much more remains to be done, as many of the lines have been constructed with an unusual proportion of steep gradients, of which the worst are on the trunk lines, and are so situated that the whole of the traffic must pass over them. In the southern system, the line at Cooma reaches an altitude of 2,659 feet above the sea level; in the western, at the Clarence station, Blue Mountains, a height of 3,658 feet is attained;

while on the northern line the highest point, 4,471 feet, is reached at Ben Lomond. In no other colony of Australasia do the lines attain such an altitude. In Queensland the maximum height is 3,008 feet; in Victoria, 2,452 feet; in South Australia, 2,024 feet; in Western Australia, 1,522 feet; and in New Zealand, 1,252 feet. Where heavy gradients prevail, the working expenditure must necessarily be heavier than in the colonies where the surface configuration is more level.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the colony during the year 1881, and for the last ten years, together with the receipts from the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	d.
1881	6,907,312	488,675	16·97
1891	19,037,760	1,177,037	14·84
1892	19,918,916	1,189,231	14·33
1893	19,932,703	1,115,042	13·43
1894	19,265,732	1,047,029	13·04
1895	19,725,418	1,022,901	12·45
1896	21,005,048	1,043,922	11·93
1897	22,672,924	1,098,696	11·63
1898	23,233,206	1,126,257	11·63
1899	24,726,067	1,158,198	11·22
1900	26,486,873	1,227,355	11·12

It will be seen that the years 1896 to 1900 show far larger numbers of passenger journeys than preceding years, but less satisfactory results in the way of average receipts per journey. This does not so much arise from curtailment of long-distance travelling as from the change of a large body of travellers from first to second class—a result due to diminished means, and doubtless to some extent to the more comfortable carriages now provided for second-class passengers. A return to prosperous times should show an increase in first-class travellers, but it frequently happens that the removal of the original impelling cause is not followed by a return to previous habits, so that the railways may not altogether recover the revenue lost by the change on the part of the travelling public.

The amount of goods tonnage from 1881 to 1900 is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	tons.	£
1881	2,033,850	955,551
1891	3,802,849	1,797,384
1892	4,296,713	1,918,065
1893	3,773,843	1,812,014
1894	3,493,919	1,766,512
1895	4,075,093	1,855,303
1896	3,953,575	1,776,495
1897	4,567,041	1,916,046
1898	4,630,564	1,900,491
1899	5,248,320	1,987,075
1900	5,531,511	1,936,217

The subdivision of the tonnage of goods and live stock for the year ended 30th June, 1900, into a general classification is set forth in the subjoined statement. Particulars of the tonnage are given under nine broad classes, while the table also shows the average distance goods of each class were carried, and the average earnings per ton per mile. The last figure, however, does not include the terminal charges, which would probably increase the revenue per ton per mile by about 0·20d., from 1·26d. to 1·46d. The "miscellaneous" traffic comprises timber, bark, agricultural and vegetable seeds, in 5-ton lots ; firewood, in 5 ton lots ; bricks, drain pipes, and various other goods. "A" and "B" classes consist of lime, fruit, vegetables, hides, tobacco leaf, lead and silver ore, caustic soda and potash, cement, copper ingots, fat and tallow, mining machinery, ore tailings, leather, agricultural implements in 5 ton lots ; and various other goods.

Description of Traffic.	Tons carried.	Average number of miles each ton of traffic is carried.	Earnings per ton per mile.
		miles.	d.
Coal, coke, and shale	3,406,769	15·93	0·60
Firewood	204,820	28·95	0·79
Grain, flour, &c.	361,052	169·95	0·56
Hay, straw, and chaff	118,631	176·39	0·34
Miscellaneous	525,503	70·07	0·67
Wool	84,678	247·30	2·33
Live stock	188,595	243·88	1·54
"A" and "B" classes	354,908	95·99	1·33
All other goods	286,555	139·78	3·34
	5,531,511	57·92	1·26
Terminal charges	.....	.....	0·20
Total	5,531,511	57·92	1·46

The charge for carrying goods one mile along the lines of the colony in 1872 was 3·6d. per ton, while after an interval of twenty-eight years, it has fallen to 1·46d. The decrease, however, is to some extent more apparent than real, inasmuch as it represents a more extensive development of the mineral traffic than of the carriage of general merchandise; but, when due allowance has been made on this score, it will be found that the benefit to the general producer and consumer has been very substantial, and it may safely be taken as indicating generally the lessened cost of carriage to persons forwarding goods by rail.

Victoria.

Railway operations in Victoria began with the opening of the line from Flinders-street, Melbourne, to Port Melbourne. In the early years the lines constructed were chiefly in the vicinity of the metropolis, and up to the year 1865, that is in ten years, only 274 miles were laid down; during the next decennial period a further length of 312 miles was constructed. As in the case of other colonies, more energy was manifested during the decade ended 1885, when no less than 1,092 miles were constructed; during the next ten years the rate of progress was maintained, and a further length of 1,444 miles was opened. The length of line open for traffic on 30th June, 1900, was 3,218 miles, upon which the sum of £39,658,819 has been expended for construction and equipment, or an average of £12,324 per mile.

The railways of the colony are grouped under seven systems—the Northern, North-Eastern, Eastern, South-Eastern, North-Western, South-Western, and Suburban lines. The Northern system extends from Melbourne to Echuca; the North-Eastern stretches from Kensington to Wodonga, and is the main line connecting Melbourne with Sydney; the Eastern connects Prince's Bridge, Melbourne, with Bairnsdale; the South-Eastern runs from Lyndhurst to Port Albert; the North-Western, joining Laverton with Serviceton, is the main line connecting Melbourne with Adelaide; the South-Western runs from Breakwater to Port Fairy; and the suburban system makes provision for the requirements of the population within a distance of about twenty miles from the metropolis. Included in the seven systems are no less than eighty-five main, branch, and connecting lines. With the exception of the eastern and extreme north-western portions of the colony, where settlement is sparse, the railway facilities provided are in advance of those of any other colony, in so far as the length of the line open for traffic is concerned.

Victoria, in 1883, was the first colony of the group to adopt the system of placing the management and maintenance of the railways under the control of three Commissioners. From the 1st February, 1884, to the end of 1891 the construction as well as the working of the lines was vested in this body; but on the 1st January, 1892, the duty

of construction was transferred to the Board of Land and Works under the provisions of the "Railways Act, 1891." During 1896 the number of commissioners was reduced to one.

Revenue and Working Expenses.

The net earnings, that is the sum available to meet interest charges during the last decennial period, are shown in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1891	3,298,567	2,310,645	987,922	70·05
1892	3,095,122	2,138,139	956,983	69·08
1893	2,925,948	1,850,291	1,075,657	63·30
1894	2,726,159	1,635,419	1,090,740	59·99
1895	2,581,591	1,543,393	1,038,198	59·77
1896	2,401,392	1,546,475	854,917	64·39
1897	2,615,935	1,563,805	1,052,130	59·77
1898	2,608,896	1,646,054	962,842	66·92
1899	2,873,729	1,797,726	1,076,003	62·55
1900	3,025,162	1,902,540	1,122,622	62·89

It will be observed that the gross earnings for the opening year of the decade are larger than those of the year just closed, but the net earnings for 1900 show a decided improvement over those of the year 1891, while the proportion of working expenses to gross earnings was also considerably larger during the last-mentioned year. The intervening years show similar fluctuations to those of the other colonies comprised within the Commonwealth, due to a variety of causes, among the principal of which are—the financial crisis, the drought that has uniformly affected the whole of Australasia for some years past, and the fact that Victoria adopted the construction of a number of branch "cockspur" lines, which had to be worked at absolute loss. In many instances the lines did not even pay working expenses, apart from interest. Continued losses resulted in the closing to traffic of some of these lines during 1896 and subsequent years, and the Report for the year ended 30th June, 1900, shows that the interest charges debited to the Department in connection with them, and the expenditure on general surveys of lines which have not been completed, amounts to about £27,000 per annum, while the average loss per annum on non-paying lines is over £301,000. The net revenue shows a gradual tendency to improvement during the last five years, the fall in 1898 in comparison with the previous year being due to the fact that in 1897 the receipts were swollen by the exceptional traffic occasioned by the Jubilee celebrations. In 1898 additional expenditure, arising from increases of pay to the lower-grade employees, and from improvements

and renewals of permanent-way works and rolling stock caused a large inflation in working expenses. The proportion of working expenses to gross earnings shows a decided improvement; and notwithstanding extensive renewals of way, repairs and renewals of stock, and the extra price paid for coal under new contracts now stands much lower than it did at the commencement of the decennial period, and is unmistakably indicative of greater economy in the management of this large State asset.

Interest returned on Capital.

Continuing the basis adopted in the case of New South Wales of taking into consideration the absolute interest paid on the loans of the colony and comparing this with the net earnings, the following table furnishes a review for the past ten years, and shows the average loss for each year of the period :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1891	2·71	4·00	1·29
1892	2·58	3·99	1·41
1893	2·87	4·02	1·15
1894	2·88	4·04	1·16
1895	2·73	4·02	1·29
1896	2·24	4·08	1·84
1897	2·74	4·00	1·26
1898	2·49	3·99	1·50
1899	2·75	3·95	1·20
1900	2·83	3·95	1·12

The earning power of the Victorian lines is largely impeded by the necessity of working fifty-five of the lines upon which there is an annual loss of £301,000. The fluctuations in net profits are due to the opening of new lines in sparsely-settled districts and the effect of the drought upon the traffic. A gradual improvement is, however, manifest in the returns of the past five years, and the concluding year shows a substantial increase over the opening one of the period.

Earnings and Expenses per Mile.

While the present returns bear no comparison with those of 1872, when the net earnings per train mile were 73·29d. and per mile open £1,342, they show a decided improvement per train mile on the figures for 1891, although the net earnings per mile open are lower than those

shown for that year. The gross earnings, expenditure, and net earnings per train mile for the past ten years are set forth in the following table :—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1891	64·63	45·27	19·36
1892	62·91	43·46	19·45
1893	65·17	41·21	23·96
1894	64·49	38·69	25·80
1895	64·76	38·72	26·04
1896	64·11	41·29	22·82
1897	68·03	40·67	27·36
1898	67·77	42·76	25·01
1899	71·00	44·41	26·59
1900	71·83	45·17	26·66

The gross earnings, expenditure, and net earnings per average mile open for the past ten years were as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	1,245	872	373
1892	1,094	756	338
1893	998	631	367
1894	914	548	366
1895	837	500	337
1896	769	495	274
1897	837	500	337
1898	835	527	308
1899	920	576	344
1900	949	597	352

The tables indicate that while the gross earnings are gradually improving, the strictest economy will be necessary in the matter of expenditure, for the improvement in the revenue has so far been almost wholly neutralized by an increase in the working expenses, and the net earnings per train mile are little better than those for 1895.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the colony during the year 1881, and for each of the last ten

years, with the receipts from coaching traffic and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	d.
1881	18,964,214	770,617	9·75
1891	57,996,039	1,706,803	7·06
1892	55,148,122	1,644,315	7·16
1893	46,520,784	1,508,867	7·78
1894	40,880,378	1,359,675	7·98
1895	40,210,733	1,259,609	7·51
1896	40,993,798	1,264,219	7·40
1897	42,263,638	1,328,687	7·55
1898	43,090,749	1,325,062	7·38
1899	45,805,043	1,372,000	7·19
1900	49,332,899	1,469,910	7·15

The number of passengers carried on the railways of Victoria reached its maximum in 1890, when no less than 58,951,796 persons made use of the lines. The reaction following on the banking crises of 1893 considerably affected the traffic, and in 1895 the number of passengers was reduced to 40,210,733 ; a gradual improvement has since, however, been manifest in the returns. Victoria occupies the leading position among the colonies as regards the number of passengers carried, the latest figures being as follow :—New South Wales, 26,486,873; Victoria, 49,332,899 ; Queensland, 4,395,841 ; South Australia, including the Northern Territory, 7,430,155 ; Western Australia, 6,225,068 ; Tasmania, 640,587 ; and New Zealand, 5,468,284. The superiority of the Victorian figures results from the large number of passengers carried on the suburban railways, the Melbourne system effectively serving the population within a distance of twenty miles from the centre, and carrying upwards of 90 per cent. of the total passengers. The magnitude of the suburban traffic is evidenced by the fact that the average receipts per journey during the last year are shown to be 7·15d., as against 11·12d. in New South Wales ; 27·60d. in Queensland ; 11·02d. in South Australia, including Northern Territory ; 13·00d. in Western Australia ; 27·40d. in Tasmania ; and 20·83d. in New Zealand.

The amount of goods and live stock tonnage in 1881, and for each of the ten years from 1891 to 1900, is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	Tons.	£
1881	1,366,603	894,592
1891	3,262,427	1,591,764
1892	2,720,886	1,450,807
1893	2,558,378	1,417,081
1894	2,455,811	1,366,484
1895	2,435,857	1,321,982
1896	2,163,722	1,137,173
1897	2,383,445	1,287,248
1898	2,408,665	1,283,834
1899	2,779,748	1,501,729
1900	2,998,303	1,555,252

The table indicates a gradual increase in the tonnage carried and earnings therefrom during the last five years. The figures for 1900 must be considered highly satisfactory, especially when it is remembered that the harvest conditions generally were not so good, and that substantial reductions in rates had been made during the year. Particulars of the subdivision of the tonnage of goods and live stock into a general classification are not available, and no information is furnished that will admit of a comparison being made in order to determine how far the cost of carriage per mile has been reduced during the period under review.

QUEENSLAND.

The progress of railway construction in Queensland for the first ten years after the opening of the Ipswich to Grandchester line was somewhat slow, only 268 miles having been constructed. In the decade ending in 1885, more energy was displayed, inasmuch as a further length of 1,167¼ miles was constructed, and during the quinquennial periods ending in 1890 and 1895, further lengths of 712 and 250 miles were constructed. The length of line open on 30th June, 1900, was 2,801 miles, and the amount expended thereon for construction and equipment was £19,320,902, or at the rate of £6,897 per mile.

The railways of the Colony may be grouped into three divisions, comprising eight systems. The southern division extends from Brisbane to Wallangarra in a southerly direction, to Cunnamulla in a westerly direction, and to Gladstone northerly along the coast, and has fifteen branch lines connected with it. The central division extends from Archer Park to Longreach, and has five branch lines connected with it. The northern division comprises the line from Mackay to Eton and Mirani ; the line from Bowen to Wangaratta ; the line from Townsville

to Winton, with a branch to Ravenswood; the line from Cairns to Maruba; the line from Cooktown to Laura; and the line from Normanton to Croydon.

For many years the construction, maintenance, and control of the railways were carried out by a branch of the Public Works Office, and subsequently by a separate Ministerial Department with a Secretary responsible to Parliament and administering the details of the office in a manner similar to any other Crown Minister. The "Railways Act of 1888," however, while leaving the Minister in charge of the Department, vested the construction, management, and control of all Government railways in three Commissioners, of whom one was to be Chief Commissioner. The number was subsequently reduced to two, and later a single commissioner was appointed holding the authority formerly vested in the three. In undertaking railway construction the State is guided by other considerations than those which would direct the action of private investors, and is content, for a time at least, to recoup the expenditure in an indirect form. The construction of railways in a colony like Queensland has the effect of largely increasing settlement, and a perusal of the subsequent pages will show that the interest returned on capital cost is increasing each year, and the period is approaching when the colony will be in a position to meet all interest charges.

Revenue and Working Expenses.

The net sum available to meet interest charges during the last decennial period is shown in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1891	908,704	645,597	263,107	71·05
1892	1,052,536	639,502	413,034	60·76
1893	1,022,677	638,889	383,788	62·47
1894	955,747	598,403	357,344	62·61
1895	1,025,512	581,973	443,539	56·75
1896	1,085,494	644,362	441,132	59·36
1897	1,179,273	684,146	495,127	58·01
1898	1,215,811	686,066	529,745	56·43
1899	1,373,475	784,811	588,664	57·14
1900	1,464,399	948,691	515,708	64·78

The foregoing table shows a gradual tendency for earnings to increase, especially of late years, but there have been considerable fluctuations in the proportion of working expenses to gross earnings. The net earnings for the year ended 30th June, 1900, were 35·22 per cent. of the total earnings, as against 36·33 per cent. when the railways were placed under their present control. It will be observed that the result secured for the past year is considerably lower than those of the preceding two years, and is due to the fact that the railways have been compelled to carry very large numbers of starving stock and large quantities of fodder at unremunerative rates. There were also heavy disbursements to replace and increase the stock of locomotives, and in carrying out works which, though improving the equipment of the railways and ensuring safe running, have not been of a reproductive character, while during the year substantial increases in pay have been conceded to all classes of railway employees. There was consequently a large increase in expenditure which was not accompanied by a corresponding improvement in the earnings, but there can be no doubt that these changes will have a beneficial effect on the receipts of future years.

Interest returned on Capital.

The financial results of the working of the lines are exhibited in the following table which covers a period of ten years :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1891	1·74	4·05	2·31
1892	2·57	3·93	1·36
1893	2.37	4·18	1·81
1894	2·18	4·17	1·99
1895	2·68	4·12	1·44
1896	2·63	4·03	1·40
1897	2·87	4·03	1·16
1898	2·92	4·03	1·11
1899	3·15	4·03	0·88
1900	2·67	4·01	1·34

A fair proportion of the railway construction of recent years has been in country of a purely pastoral character, and it is manifest that a sufficient traffic to prove remunerative cannot be looked for immediately from localities possessed of only a scattered and limited population; but it is confidently expected that these lines will ultimately pay interest on their construction. Unfortunately, Queensland like all the other provinces, suffers from the construction of lines of railway not warranted by existing or prospective traffic, and which will always be a handicap to successful management.

Earnings and Expenses per Mile.

While the results now secured cannot be compared with those of 1880, when the net earnings per train mile were a little over 43d., and per mile open £222, there is cause for congratulation on a review of the condition of earnings shown in the subjoined tables. It will be seen that the net earnings per train mile, as well as the net return for each mile of line open, have been fairly well sustained. The fall in 1900, as compared with the previous three years, is due to the fact that the continuance of the drought and the consequent loss in sheep have operated against the revenue from the carriage of wool, while the increased traffic which was obtained consisted largely of the removal of starving stock from and the carriage of fodder to drought-stricken districts, a class of traffic which had to be undertaken at unremunerative rates. The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table:—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1891	57·75	41·00	16·75
1892	63·69	38·70	24·99
1893	65·35	40·83	24·52
1894	64·18	40·18	24·00
1895	62·82	35·65	27·17
1896	54·91	32·59	22·32
1897	57·30	33·24	24·06
1898	58·27	32·88	25·39
1899	56·62	32·35	24·27
1900	54·69	35·43	19·26

The gross earnings, expenditure, and net earnings per average mile open for the past ten years were as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	424	301	123
1892	458	278	180
1893	428	268	160
1894	402	252	150
1895	431	245	186
1896	455	270	185
1897	486	282	204
1898	470	265	205
1899	506	289	217
1900	523	339	184

Coaching and Goods Traffic.

The number of passengers carried on the lines of the colony during the year 1881, and for the last ten years, together with the receipts from the traffic, and the average receipts per journey, are set forth in the following table :—

Year.	Passengers carried.	Receipts from Coaching traffic.	Average Receipts per Journey.
	No.	£	d.
1881	247,284	113,490	110·14
1891	2,730,860	337,272	29·64
1892	2,370,219	348,199	35·25
1893	2,120,163	318,730	36·08
1894	2,024,450	307,430	36·44
1895	2,054,416	308,025	35·98
1896	2,274,219	324,790	34·27
1897	2,633,556	359,811	32·79
1898	2,742,108	391,270	34·24
1899	3,716,425	447,123	28·87
1900	4,395,841	505,536	27·60

It will be seen that the years 1899 and 1900 show a far larger number of passenger journeys than preceding years ; this was largely due to an extraordinary expansion in the suburban passenger traffic. The average receipts per journey showed a decline, which may be expected to continue as the suburban traffic expands, so that in a few years the receipts per person carried will approximate closely to the average for the rest of Australia, viz., one shilling per journey.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods.	Earnings.
		£
1881	161,008	235,100
1891	890,973	571,432
1892	768,527	704,337
1893	720,587	703,947
1894	785,475	648,317
1895	900,591	717,487
1896	1,026,889	760,704
1897	1,243,603	819,462
1898	1,323,782	824,541
1899	1,684,858	926,352
1900	1,688,635	958,863

In the foregoing statement the tonnage of live stock is not included, inasmuch as particulars in respect thereof are not available, but the earnings shown include the revenue derived from this class of traffic. The general traffic is divided into eight classes, particulars of which, for the year ended 30th June, 1900, together with the receipts for each class, are shown in the subjoined table. No information is available as to the average number of miles each ton of traffic is carried, or the earnings per ton per mile.

Description of Traffic.	Tons carried.	Receipts from traffic.
		£
General merchandise	295,358	388,251
Agricultural produce	351,026	119,404
Wool	32,472	111,256
Coal	417,601	53,512
Minerals other than coal	161,154	20,701
Timber	431,024	89,949
Live stock	.....	167,153
Non-paying	.....	8,637
Total	1,688,635	958,863

Guaranteed Railways.

Four railways, having a total length of 28 miles 34 chains, have been constructed to 30th June, 1900, under "The Railways Guarantee Act of 1895," by which the local authority, representing the ratepayers of a district, agrees to pay up to one-half of the deficiency in working expenses with interest during the first fourteen years after opening, the sum to be raised by means of a rate not exceeding 3d. in the £ of value of ratable lands. Should the operations of any year provide a surplus, half of this is retained by the Government and the other half paid to the Local Authority for distribution among the ratepayers in return for the payments made on account of the deficiency in previous years. When the line has been payable for three years, the Government may cancel the agreement. The results of the working of three out of the four railways do not afford much encouragement to apply the provisions of the Act to other lines which may be projected in the future. The working of the Pialba branch showed a loss for the years 1898 and 1899 of £2,366 and £2,038 respectively, and for 1900 of £1,589; as the interest payable amounted to £1,762, there would appear to have been an excess of earnings over working expenses during 1900 to the extent of £173. As this line has shown an improvement each succeeding year, it may be reasonably anticipated that eventually the guarantors will be relieved of all responsibility. The Allora branch shows a loss of £630 for the year 1900, being considerably in excess of the deficit of the previous two years, when the shortage was £146 and £308 respectively. The Ennogera branch exhibits a loss of £3,165 for the year ended 1900, as against £1,138 for the five months during which it was open for traffic in the previous year. The Mount Morgan branch which up to the 30th June, 1899 yielded a net profit of £4,080, after providing for working expenses and interest on the cost of construction, returned a net profit of £5,785 for the year 1900.

South Australia.

While the beginning of railway construction in South Australia dates as far back as 1854, very little progress was made in the subsequent twenty years, and in 1874 the total length of line in operation was only 234 miles; in 1880 this was increased to 627 miles; in 1890 to 1,610 miles; and in 1895 to 1,722 miles. The length of line in use on 30th June, 1900 was 1,736¼ miles, and the amount expended thereon for construction and equipment, £13,014,428, or at the rate of £7,496 per mile.

The railways of South Australia proper for the purposes of management are divided into five systems. The Midland system, constructed on the 5ft. 3in. gauge, has a length of 236¾ miles, and extends from Adelaide to Terowie in a northerly direction, and to Morgan, on the

Murray River, in a north-easterly direction. The Northern system has a total length of 1,008¼ miles, 1,003 of which are 3 ft. 6 in. gauge and 5¼ miles 5ft. 3in. gauge. This system includes that portion of the transcontinental line which extends to Oodnadatta, a distance of 550 miles from Adelaide; the line to Cockburn, which provides for the requirements of the Broken Hill district of New South Wales; and branches to Port Augusta, Port Pirie, Wallaroo, and Port Wakefield. The Southern system comprises a length of 265¼ miles on a gauge of 5ft. 3in., and includes the main line connecting Adelaide with Melbourne, and branches—Wolseley to Naracoorte and from Naracoorte to Kingston, Mount Gambier, and Beechport. The line from Port Broughton to Barunga has a length of 10 miles.

During 1887, the control of the railways was confided to three commissioners; in 1895, however, the number was reduced to one, who is responsible to Parliament.

Revenue and Working Expenses.

The net sum available to meet interest charges is set forth in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	£
1891	1,223,999	617,179	606,820	50·42
1892	1,213,290	652,941	560,349	53·82
1893	1,007,059	640,122	366,937	63·56
1894	999,707	569,592	430,115	56·98
1895	960,155	568,973	391,182	59·26
1896	986,500	583,022	403,478	59·10
1897	1,025,035	614,254	410,781	59·92
1898	984,228	603,474	380,754	61·31
1899	1,058,397	617,380	441,017	58·33
1900	1,166,987	657,841	509,146	56·37

The foregoing table shows that the gross earnings in the opening year of the decade were larger than in any subsequent year, while the proportion of working expenses to gross earnings was the lowest for the same period. The net earnings secured during the year 1900 are the highest for the last eight years and the proportion of working expenses to gross earnings the smallest for a like period. The failure of the harvest and the succession of adverse seasons which South Australia laboured under during part of the decennial period are the causes of the falling off in the railway revenue in some years. No other railway system in Australia depends so much upon the carriage of agricultural produce

for its traffic as does the South Australian, and years of shrinkage in the railway revenue are always years of harvest failure. The increase in working expenses during the last two years was due to the renewal of rolling stock, the relaying of portion of the permanent way, and additional outlay arising from the improved revenue. The results secured may be looked on as satisfactory, having regard to the fact that the management is burdened with some very unproductive lines, notably that from Hergott Springs to Oodnadatta, which barely pays working expenses, and entails an annual payment of about £44,000 in interest.

Interest returned on Capital.

The following table exhibits the financial results of the working of the lines during the last ten years :—

Year.	Interest returned on Capital.	Actual rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1891	5·32	4·08	1·24*
1892	4·78	4·08	0·70*
1893	3·07	4·28	1·21
1894	3·54	4·27	0·73
1895	3·12	4·22	1·10
1896	3·21	4·12	0·91
1897	3·26	4·05	0·79
1898	2·98	4·03	1·05
1899	3·42	3·95	0·53
1900	3·91	3·87	0·04*

* Represents profit.

It will be observed that the interest returned on capital during the past year was the best secured since 1892, and exceeded by a slight amount the interest rate on the debt of the province. South Australia possesses one advantage not shared by any other province, namely, a large and steady long-distance traffic from a neighbouring state. The Broken Hill traffic is a very important factor to the state railways, as the greater portion of the line connecting the mines with the sea ports runs through South Australian territory. The extent of the Broken Hill traffic will be found mentioned on page 682.

Earnings and Expenses per Mile.

The net earnings now secured are very much below those of 1891 when the net earnings per train mile were 38·64d., and £370 per mile open; a gradual improvement is, however, noticeable during recent years. The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table:—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1891	77·94	39·30	38·64
1892	69·69	37·50	32·19
1893	65·85	41·86	23·99
1894	69·14	39·39	29·75
1895	67·90	40·24	27·66
1896	68·57	40·53	28·04
1897	66·95	40·12	26·83
1898	63·57	38·98	24·59
1899	65·14	38·00	27·14
1900	67·02	37·78	29·24

The gross earnings, expenditure, and net earnings per average mile open for the past ten years are set forth in the following table:—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	747	377	370
1892	730	393	337
1893	606	385	221
1894	601	342	259
1895	558	331	227
1896	573	339	234
1897	595	356	239
1898	571	350	221
1899	614	358	256
1900	674	380	294

It will be seen that there was a substantial fall in the net earnings per train mile for 1893. An improvement was, however, manifest in the succeeding year, for while the gross revenue was smaller than that of 1893, the proportion of working expenses was considerably reduced. The results for the past year may be viewed as satisfactory from the point of management, taking into consideration the fact that the maximum number of train miles run for the decennial period occurred during the past year. The present earnings per train mile are well above the average of the Commonwealth as a whole, although the return per mile of line does not compare so favourably.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the Colony during the year 1881, and for each of the last ten years, together with the receipts from the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1881	3,032,714	151,867	12·01
1891	5,295,991	333,772	12·31
1892	5,744,487	336,501	14·05
1893	5,434,047	299,128	13·21
1894	5,260,079	274,243	12·51
1895	5,224,854	263,448	12·09
1896	5,435,956	288,594	12·73
1897	5,789,297	297,026	12·31
1898	6,050,189	291,411	11·56
1899	6,171,081	297,207	11·56
1900	7,416,506	337,723	10·93

The table indicates an improvement each year in the number of passengers carried; the average receipts per journey have, however, gradually lessened—the year 1892 showing the highest rate. The figures for 1891 and 1892 are somewhat lower than the true average for those years in consequence of travellers over several systems being counted as distinct persons on each system passed over.

The amount of goods tonnage for the same period is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	No.	£
1881	646,625	222,184
1891	1,427,123	842,089
1892	1,337,859	827,857
1893	970,805	660,371
1894	1,014,010	694,724
1895	1,000,408	666,600
1896	1,056,963	670,961
1897	1,146,293	700,269
1898	1,189,095	664,348
1899	1,403,727	731,156
1900	1,485,976	798,231

The falling off in the tonnage of goods carried in some years since 1892 is more apparent than real. Prior to 1893 the railway statistics for each section were kept distinct from those of other sections, and goods passing over more than one section were counted as additional tonnage on each section. The volume of traffic secured by South Australia from the Barrier District of New South Wales amounted to 647,069 tons out of the total of 1,485,976 tons, and the total receipts from all traffic passing through Cockburn to £450,019 out of a total revenue of £1,166,987.

The following table shows a classification of the goods carried during 1900, and the amount received for carriage. It would have been interesting to have also shown the charge for haulage of each description of goods during the last ten years, but no information is available which will enable such particulars to be compiled. There has been a general reduction in freight charges, and the average charge per ton per mile for all goods has fallen from 1·05d. in 1897 to 0·97d. in 1900 :—

Description of Traffic.	Tons Carried.	Receipts from Traffic.
		£
Minerals	793,998	340,811
Grain	126,027	41,398
Wool	19,196	23,910
Goods other than above	517,345	329,114
Live stock	29,410	62,998

Northern Territory.

Railway construction in the Northern Territory has been confined to the line from Palmerston to Pine Creek, opened on the 1st October, 1889, and the returns for the past five years show that the traffic does not even pay working expenses.

Revenue and Working Expenses.

The gross earnings, expenditure, and net earnings, with the proportion of working expenses to gross earnings of the line are set forth in the following table, which covers a period of ten years :—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1891	15,310	13,910	1,400	90·86
1892	15,221	11,665	3,556	76·64
1893	15,668	11,704	3,964	74·90
1894	16,193	11,403	4,790	70·42
1895	14,722	11,477	3,245	77·96
1896	15,105	15,289	(—) 184	101·22
1897	17,908	18,966	(—) 1,058	105·91
1898	14,124	20,268	(—) 6,144	143·50
1899	14,758	17,375	(—) 2,617	117·73
1900	14,799	24,340	(—) 9,541	164·47

(—) Denotes loss.

The experience of the past five years offers no encouragement to any further extension of railways in the Northern Territory. The actual results of working have not been quite so unfavourable as would appear from the foregoing table, as the year 1900 was charged with the payment of an instalment of £10,000 towards the reconstruction of the jetty destroyed in 1896, as narrated on the next page, and on this account shows a larger deficit than any of the previous years.

Interest returned on Capital.

The following table shows the average loss for each year during the last ten years, after the interest on cost of construction has been deducted from the net earnings :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1891	0·12	4·08	3·96
1892	0·31	4·08	3·77
1893	0·34	4·08	3·74
1894	0·42	4·08	3·66
1895	0·28	4·22	3·94
1896	(—) 0·02	4·12	4·14
1897	(—) 0·09	4·05	4·14
1898	(—) 0·53	4·03	4·56
1899	(—) 0·22	3·95	4·17
1900	(—) 0·82	4·09	4·91

(—) Denotes loss.

From the outset there was very little prospect that the traffic on this line would meet the interest on the cost of construction and equipment; and although for the first five years there was a margin after paying working expenses, the results of the past five years show that even working expenses have not been met. The deficiency is in part due to heavy expenditure necessitated by the ravages of the teredo in the substructure of the jetty at Palmerston, and by the terrific cyclone which struck Port Darwin in the early part of 1897. Fluctuations in the volume of traffic assist the deficiency created by the expenditure just referred to.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per train mile for a period of ten years are shown in the following table :—

Year.	Gross Earnings per Train Mile.	Expenditure per Train Mile.	Net Earnings per Train Mile.
	d.	d.	d.
1891	116·76	106·08	10·68
1892	117·46	90·02	27·44
1893	121·93	91·08	30·85
1894	125·14	88·12	37·02
1895	115·10	89·73	25·37
1896	114·28	115·67	(—) 1·39
1897	137·28	145·38	(—) 8·10
1898	112·97	162·12	(—) 49·15
1899	115·53	136·02	(—) 20·49
1900	114·53	188·37	(—) 73·84

(—) Denotes loss.

The gross earnings, expenditure, and net earnings per average mile open for the last decennial period were as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	105	95	10
1892	104	80	24
1893	108	80	28
1894	111	78	33
1895	101	79	22
1896	104	105	(—) 1
1897	123	130	(—) 7
1898	97	139	(—) 42
1899	102	119	(—) 17
1900	102	167	(—) 65

(—) Denotes loss.

The gross earnings show little variation from year to year, but the expenditure was increased through the series of accidents at the terminal port, to which reference has already been made.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the Palmerston to Pine Creek Line since its opening, together with the receipts from the traffic and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	d.
1890 (nine months)	4,567	4,330	227·54
1891	4,515	4,693	249·45
1892	4,541	4,159	219·80
1893	6,169	4,007	155·89
1894	4,076	3,820	224·91
1895	2,950	3,755	305·48
1896	2,901	3,772	312·04
1897	3,080	4,055	315·97
1898	3,126	3,556	273·01
1899	3,191	3,173	238·64
1900	3,374	3,556	260·48

The table shows an increase in the number of passengers carried during 1893; but the promise of the year was not sustained, and the traffic fell away by more than one-half during the following years, although the earnings did not decline in anything like the same proportion. The receipts per journey indicate that a large proportion of the traffic is of a long-distance character.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	Tons.	£
1890 (nine months)	2,114	7,499
1891	2,426	9,035
1892	2,633	9,267
1893	2,328	9,470
1894	2,524	10,260
1895	2,053	8,643
1896	2,493	9,149
1897	3,150	11,222
1898	2,678	8,570
1899	3,187	10,091
1900	3,009	9,626

The average receipts per ton per mile during the year 1900 were 7·65d., as against 8·43d. in 1896.

Western Australia.

The first railway constructed in Western Australia was that from Geraldton to Northampton, a length of 34 miles 17 chains, opened for traffic on the 26th July, 1879. Between that date and the close of 1885, a further length of 91 miles 55 chains was constructed. To the end of 1890, only 200½ miles were constructed, and on the 30th June, 1895, there were 573 miles open for traffic. Railway construction received a considerable impetus subsequent to 1895, and on the 30th June, 1900, there were 1,355 miles open for traffic, at a cost of £6,856,363 for construction and equipment, or at the rate £5,060 per mile.

The State railways of Western Australia are comprised in four systems. The Eastern system has a total length of 572 miles 38 chains, and includes the line from Fremantle to Kalgoorlie, with branches to Boulder, Menzies, Kanowna, Newcastle, Beverley, Greenhills, Perth Racecourse, and Owen's Anchorage, and the Mahogany Creek deviation ; the South-western system comprises the line from East Perth to Bunbury, with branches to Colliefields, Bridgetown, Busselton, and Canning and Bunbury Racecourses, and has a length of 234 miles 22 chains ; the Northern system includes the line from Geraldton to Cue, with branches to Walkaway and Northampton, and a total length of 305 miles 45 chains ; and the Great Southern system from Beverley to Albany, a length of 243 miles.

The control of the State railways is vested in the Commissoner for Railways, as member of the Government, but the active management is undertaken by an officer with the title of General Manager.

Revenue and Working Expenses.

The net sum available to meet interest charges during the last ten years is shown in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1891	64,034	63,536	498	99·22
1892	94,201	90,654	3,547	96·23
1893 (half-year)	54,668	47,069	7,598	86·10
1894	140,564	103,973	36,591	73·96
1895	296,000	182,046	113,954	61·50
1896	529,616	263,704	265,912	49·79
1897	915,483	577,655	337,828	63·09
1898	1,019,677	786,318	233,359	77·11
1899	1,004,620	712,329	292,291	70·91
1900	1,259,512	861,470	398,042	68·40

From the foregoing statement it will be seen that the gross earnings have increased from £64,034 in 1891 to £1,259,512 in 1900. The rush to the gold-fields of Western Australia has brought an enormous amount of traffic to the railways of that colony, and the lines stand in a position which it is impossible for those of any other province to attain, except under similar circumstances. The proportion of working expenses to gross earnings during the decade has been reduced from 99·22 per cent. to 68·40 per cent., the intervening years showing considerable irregularity. The rates for the carriage of merchandise are so low that the revenue derived from the traffic is hardly sufficient to pay for working it, and with a view to economy during 1899 the train service was considerably curtailed, and trains previously confined to passenger traffic were converted into mixed trains, conveying both passengers and goods, the result being a substantial reduction in working expenses proportionately to the gross earnings.

Interest returned on Capital.

The following is a statement of the average interest earned by the railways on the money invested in them, and affords a comparison with the interest paid on the public debt of the colony :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average gain.
	per cent.	per cent.	per cent.
1891	0·05	4·21	*4·16
1892	0·37	4·09	*3·72
1893 (half-year)	0·79	4·09	*3·30
1894	3·12	4·09	*0·97
1895	5·45	4·09	1·36
1896	11·48	3·84	7·64
1897	9·05	3·60	5·45
1898	4·62	3·59	1·03
1899	4·55	3·54	1·01
1900	5·81	3·46	2·35

* Average loss.

The railways of Western Australia have not only met working expenses during the past six years, but have left a margin after making provision for the payment of interest on capital expenditure. In the construction of these railways, few engineering difficulties were met with, and the lines, which are of a light character, were constructed at a cheaper rate than those of any other colony. This fact, together with the enormous increase in coaching and goods traffic, due to the development of the gold-fields, has been instrumental in securing such a favourable return.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per train mile for the last ten years are shown in the following table :—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1891	49·37	48·98	0·39
1892	55·62	53·52	2·10
1893 (half-year)	55·87	48·10	7·77
1894	52·59	38·90	13·69
1895	71·22	43·79	27·43
1896	82·44	41·05	41·39
1897	86·59	54·64	31·95
1898	67·72	52·22	15·50
1899	74·01	52·48	21·53
1900	71·70	49·04	22·66

The gross earnings, expenditure, and net earnings per average mile open for the past ten years were as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	315	313	2
1892	464	447	17
1893 (half-year)	269	232	37
1894	438	324	114
1895	538	331	207
1896	913	455	458
1897	1,103	696	407
1898	1,047	807	240
1899	791	561	230
1900	930	636	294

While the gross earnings per train mile have increased from 49·37d. in 1891 to 71·70d. in 1900, the net earnings show a greater improvement during the period, having risen from 0·39d. in the former year to 22·66d. in the latter. The causes that have led up to this have already been indicated. It will be observed that the expenses per train mile have been reduced since 1897, and this has been secured by the adoption of the system of mixed trains. The volume of coaching and goods traffic carried during 1898 was larger than in previous years, but the net earnings per average mile open show a marked reduction. The increased traffic, of course, necessitated extra expenditure; and being accompanied by a reduction in rates, had the temporary effect of reducing the net earnings. It is estimated that the adoption of the new rates, as compared with the old, involved a loss during 1898 of at least £232,000 in the working of the Northam, Southern Cross, Coolgardie, and Kalgoorlie railways, but the wisdom of the railway policy of the country is justified by the results of the following two years.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the State lines of the colony during the year 1887, the earliest for which particulars are available, and for the last ten years, together with the receipts for the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1887	173,656	19,032	26·29
1891	277,997	26,750	23·08
1892	456,631	33,693	17·70
1893 (half-year)	286,520	16,967	14·20
1894	617,080	47,804	18·59
1895	1,022,248	107,278	25·17
1896	1,679,816	150,597	21·51
1897	3,607,486	303,124	20·16
1898	5,669,444	345,174	14·61
1899	5,872,200	312,685	12·78
1900	6,225,068	342,468	13·00

The statement shows a large increase in the number of passengers carried each year ; the gradual reduction in the average receipts per journey shows the expansion of the suburban and local traffic.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods.	Earnings.
		£
1887	52,151	20,380
1891	96,498	34,940
1892	135,890	56,350
1893 (half-year)	86,004	34,641
1894	204,686	80,669
1895	255,839	181,695
1896	435,757	352,597
1897	858,748	572,715
1898	1,203,911	646,695
1899	1,148,252	655,863
1900	1,384,040	884,843

It will be seen that the increase in the goods traffic has been considerable, the tonnage in 1898 being nearly double that of 1897, and in 1900 about 60 per cent. in excess of 1898 ; but owing to reduction in the charges for carriage, the earnings have not shown so considerable an expansion.

Tasmania.

The progress of railway construction in Tasmania has been somewhat slow, for owing to the fact that the island is small and possesses numerous harbours, the railways have had to face severe competition with sea-borne traffic. As stated earlier in the chapter, the line from Launceston to Deloraine, 45 miles in length, was opened on 10th February, 1871, and though an agitation long existed for the construction of a railway between the principal centres, Hobart and Launceston, it was not till the 1st November, 1876, that it was opened for traffic. No further extension was made until 1884, when an increase of 48 miles was made, and up to 1890 the total mileage opened was only 398, of which 48, opened in 1884, were constructed by a private company. The length of State railways opened to 30th June, 1900, was 437¾ miles, at a cost of £3,604,222 for construction and equipment, or at the rate of £8,233 per mile.

The lines of State railway in operation in Tasmania are the Western, from Launceston to Ulverstone, with branch to Chudleigh; the Main line from Hobart to Launceston, with branches from Launceston to Scottsdale, Parattah to Oatlands, Conara Junction to St. Mary's, Bridgewater to Glenora, and Brighton Junction to Apsley; the Sorell line, from Bellerive to Sorell; and the West Coast line, from Strahan Wharf to Maestris.

The control of the railways is vested in the Department of Lands and Works, the active management being undertaken by an officer with the title of General Manager.

Revenue and Working Expenses.

The net sum available to meet interest charges in connection with the railways of the colony for each of the years during the last decennial period was as follows :—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	£
1890	106,232	86,220	20,012	81·16
1891	169,050	147,944	21,106	87·51
1892	176,926	161,586	15,340	91·32
1893	152,083	136,468	15,615	89·73
1894	144,488	122,850	21,638	85·02
1895	149,642	120,351	29,291	80·42
1896	162,932	122,171	40,761	74·98
1897	166,834	128,544	38,290	77·04
1898	178,180	141,179	37,001	79·23
1899	193,158	152,798	40,360	79·10

The year 1890 should be omitted from any comparison with recent years, as it was in that year that the State took over the main line from the company by which it was previously owned. The cost of working the Tasmanian railways is comparatively high—much higher than in any other Australasian system, and, like the New Zealand lines, the railways have to face severe competition with sea-borne traffic, while there are no large inland centres that could support railways. There is a marked decrease year by year in the Australian traffic *vid* Launceston, which is attributed to the great improvement in the direct steamer service between Melbourne and Hobart.

Interest returned on Capital.

The following table shows the average loss on the working of the Tasmanian railways for each year during the last ten years :—

Year.	Interest returned on Capital.	Actual rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1890	0·68	4·11	3·43
1891	0·68	4·19	3·51
1892	0·43	3·23	2·80
1893	0·44	3·23	2·79
1894	0·61	3·96	3·35
1895	0·83	3·88	3·05
1896	1·16	3·87	2·71
1897	1·09	3·84	2·75
1898	1·03	3·82	2·79
1899	1·12	3·80	2·68

The foregoing table shows that there has been a slight improvement in the condition of the railway revenue during the past five years. The competition already referred to, together with the heavy initial cost of the railways themselves, especially of the main line connecting Hobart with Launceston, for which the price paid by the Government on its resumption was at the rate of £9,069 per mile, as against an average of £8,233 per mile for the lines of the colony generally, render it extremely difficult, even with the most careful management, to effect any considerable diminution in the average loss. Even in the case of the Western line from Launceston to Ulverstone, which passes through the finest tract of agricultural land in the colony, the return, after paying working expenses for the year ended 30th June, 1900, was only 1·95 per cent. on the cost of construction and equipment.

Earnings and Expenses per Mile.

The following tables indicate the gross earnings, expenditure, and net earnings per train mile and per mile of line open. It will be observed that the net earnings per train mile reached 13d. in 1896, a point beyond which it does not seem likely there will be much expansion. This compares very unfavourably with the results of other parts of Australia.

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings. per train mile.
	d.	d.	d.
1890	46·13	37·44	8·69
1891	44·64	39·07	5·57
1892	46·73	42·68	4·05
1893	45·63	40·94	4·69
1894	45·83	38·96	6·87
1895	49·36	39·69	9·67
1896	52·85	39·63	13·22
1897	52·34	40·33	12·01
1898	56·17	44·50	11·67
1899	57·50	45·49	12·01

The earnings and expenditure per average mile open were as follows :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1890	425	345	80
1891	458	401	57
1892	424	387	37
1893	356	319	37
1894	338	287	51
1895	350	281	69
1896	381	286	95
1897	386	297	89
1898	400	317	83
1899	434	343	91

The peculiar position of Tasmania has already been referred to. The portions of the lines at first constructed were within the more densely populated districts, and the later extensions were projected into the more thinly-peopled areas, which were without sufficient production to afford a payable traffic. In comparison with the other colonies the proportion of expenses to gross earnings is extremely high, and while the last five years show an improvement, it does not seem possible under present conditions to reduce expenditure.

Coaching and Goods Traffic.

Particulars in respect of the number of passengers carried on the State lines of Tasmania during the year 1881, and for the last ten years, together with receipts from the traffic and the average receipts per journey, are set forth in the following table :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1881	102,495	10,396	24·34
1890	464,064	52,725	27·26
1891	725,724	92,209	30·49
1892	704,531	87,506	29·80
1893	546,671	64,428	28·28
1894	514,461	58,070	27·09
1895	526,814	57,947	26·39
1896	542,825	59,771	26·43
1897	603,530	62,447	24·88
1898	617,643	68,317	26·54
1899	640,587	73,147	27·40

It will be seen that during the years 1891 and 1892 a large increase is shown in the number of passengers carried. This was due to the resumption of the main line connecting Hobart with Launceston, the returns for the years in question being swollen by the traffic over the increased length of line. The increase, however, was not sustained, for in the subsequent year a large diminution in the number of persons making use of the lines was recorded. There has since been a revival of traffic, and there are good grounds for supposing that this improvement will be continued. The average receipts per journey do not vary to any considerable extent, the amount of suburban traffic properly so-called being very small.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
		£
1881	21,043	8,332
1890	141,327	42,826
1891	161,141	65,856
1892	178,224	76,182
1893	164,982	73,490
1894	174,457	73,639
1895	204,480	78,797
1896	229,707	85,780
1897	229,620	86,941
1898	235,096	93,620
1899	312,446	107,661

No information is available showing the subdivision of the tonnage of goods and live stock for the year into a general classification. The average distance each ton of goods was carried was 38·33 miles, and the average receipts per ton per mile 1·81d.

New Zealand.

The continuance of the native war in New Zealand, militated against the rapid extension of the railways, and at the close of the war in 1870 there were only 46 miles in operation. In 1875 the length of line opened for traffic had increased to 542 miles; in 1885, to 1,613 miles; in 1890, to 1,842 miles; and in 1895 to 2,014 miles. The length of line opened to 31st March, 1900, was 2,104 miles, at a cost of £16,703,887 for construction and equipment, or at the rate of £7,939 per mile.

The railway system of the Colony is divided into eleven sections. The Kawakawa and Whangarei sections, in the extreme north of the North Island, are short lines to coal-fields, and the Kaihu section was built for the purpose of tapping large timber areas inland. The Auckland section forms the northern portion of the North Island main trunk railway, which, when complete, will terminate at Wellington, on the shores of Cook's Strait. The Wellington-Napier-New Plymouth section comprises the group of lines which serve the southern portion of North Island. In the northern portion of Middle Island, the Grey-Brunner, the Grey-Hokitika, Westport, Nelson, and Picton sections form only the first link in the chain of through communication. On the East Coast of Middle Island, the actual working portion of the main trunk line is to be found. The present terminus is at Culverden, from whence extension will be made northward. This is known as the Hurunui-Bluff section, and includes the service to Christchurch, Dunedin, Invercargill, and the Bluff.

The management of the railways of New Zealand was placed in the hands of three Commissioners in 1887, but early in 1895 the Government resumed charge of the lines, the active control being vested in an officer with the title of General Manager, who is responsible to the Minister for Railways.

Revenue and Working Expenses.

The net sum available to meet interest charges during each year of the last decennial period is set forth in the following table :—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	£
1891	1,121,701	700,703	420,998	62·47
1892	1,115,432	706,517	408,915	63·34
1893	1,181,522	732,142	449,380	61·97
1894	1,172,793	735,359	437,434	62·70
1895	1,150,851	732,160	418,691	63·62
1896	1,183,041	751,368	431,673	63·51
1897	1,286,158	789,054	497,104	61·35
1898	1,376,008	857,191	518,817	62·30
1899	1,469,665	929,738	539,927	63·26
1900	1,623,891	1,052,358	571,533	64·80

The foregoing table shows that the serious fluctuations that at times characterise the returns of the colonies on the mainland of Australia are absent from those of New Zealand, the configuration of the islands and their higher latitude rendering them to a very great extent immune from the periodical droughts to which the other colonies are so subject. The proportion of working expenses to gross earnings does not vary to any considerable extent, and the increase during the past two years is attributed to the payment of an increased rate of wages to employees, replacing old engines with new, heavy repairs due to the increased age of the stock, and the relaying of a portion of the permanent way with heavier rails. The outlook is considered so satisfactory that substantial reductions in passenger fares and freight for domestic products are contemplated.

Interest Returned on Capital.

The basis employed in the case of the colonies comprised within the Commonwealth for ascertaining the net interest payable on the railway debts cannot be adopted for New Zealand, the necessary data not being

available. The nominal loss is, therefore, shown in the following statement, the actual loss being somewhat higher :—

Year.	Interest Returned on Capital.	Average rate of Interest payable on Outstanding Loans.	Average Loss
	Per cent.	Per cent.	Per cent.
1891	2·95	4·22	1·27
1892	2·79	4·16	1·37
1893	3·05	4·42	1·37
1894	2·88	4·42	1·54
1895	2·73	4·10	1·37
1896	2·80	3·94	1·14
1897	3·19	3·92	0·73
1898	3·24	3·89	0·65
1899	3·29	3·81	0·52
1900	3·42	3·79	0·37

The foregoing table indicates that the railways are approaching the stage of being self-supporting, the interest returned on capital cost for the past six years showing an improvement each year.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table :—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1891	93·00	58·09	34·91
1892	88·75	56·32	32·43
1893	94·50	58·53	35·97
1894	90·25	56·69	33·56
1895	85·75	54·54	31·21
1896	85·75	54·53	31·22
1897	90·50	55·55	34·95
1898	90·00	56·11	33·89
1899	89·00	56·22	32·78
1900	93·00	60·31	32·69

The gross earnings per train mile have varied very little during the ten years, the lowest point touched being 85¾d., and the highest, 94½d., while the expenditure has varied even less. The expenditure during the last year was higher than in any other year during the decennial period, and the net earnings show a slight but gradual reduction during the past four years. The results, however, compare very favourably with the other colonies, and are only exceeded by those of New South Wales.

The gross earnings, expenditure, and net earnings per average mile open for the past ten years are as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1891	609	380	229
1892	598	379	219
1893	626	388	238
1894	613	384	229
1895	585	372	213
1896	592	376	216
1897	638	391	247
1898	673	420	253
1899	712	450	262
1900	774	501	273

The foregoing table indicates that the gross earnings have increased from £609 per average mile open to £774, and the net earnings from £229 to £273, the return for last year being the highest secured during the decennial period—evidence of the fact that the extensions in recent years have been judicious, and that the volume of traffic has been maintained.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the Colony during the year ended 31st March, 1882, and for the last ten years, together with the receipts from the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching traffic.	Average Receipts per Journey.
	No.	£	d.
1882	2,911,477	329,492	27·16
1891	3,433,629	333,122	23·28
1892	3,555,764	342,563	23·12
1893	3,759,044	367,594	23·47
1894	3,972,701	378,480	22·89
1895	3,905,578	360,243	22·14
1896	4,162,426	359,822	20·74
1897	4,439,387	378,684	20·47
1898	4,672,264	399,262	20·51
1899	4,955,553	438,367	21·23
1900	5,468,284	474,793	20·83

It will be observed that there was a falling off during the decennial period in the average receipts per journey. Taking the returns for the year ended 31st March, 1884, as a basis, it has been found that those

for 1900 show an increase of only 22½ per cent. in the number of passengers who travelled first-class, while the increase in those who travelled second-class was not less than 79¾ per cent. While the marked prosperity of the past two years has induced more passengers to travel first-class, it is none the less evident that the tendency is towards one class of carriage, as already exists in the case of tramways.

The amount of goods tonnage for a similar period is shown in the following table:—

Year.	Tonnage of Goods exclusive of Live Stock.	Earnings.
		£
1882	1,437,714	491,057
1891	2,086,011	690,779
1892	2,066,791	671,469
1893	2,193,330	707,786
1894	2,060,645	686,469
1895	2,048,391	683,726
1896	2,087,798	698,115
1897	2,368,927	774,163
1898	2,518,367	837,590
1899	2,624,059	882,077
1900	3,127,874	985,723

The large increase in the tonnage of goods carried during the past year over preceding years was caused by the bountiful harvest in the Middle Island, which was carried at freight rates averaging 20 per cent. below those ruling in the previous year.

The subdivision of the tonnage of goods and live stock for the year ended 31st March, 1900, is shown in the following table. Particulars of the goods traffic are set forth in seven classes, but the average distance for which goods of each class were carried, cannot be given, and there are no data available showing the average earnings per ton per mile.

Description of Traffic.	Tons carried.	Number carried.
Lime and Chaff	77,292	.....
Wool	104,620	.....
Firewood	92,126	.....
Timber	334,677	.....
Grain	764,033	.....
Merchandise	536,428	.....
Minerals	1,218,698	.....
Cattle	.....	65,063
Sheep	.....	2,523,787
Pigs	.....	36,049

Tramways.

In all the Australasian colonies tramways are in operation, but it is chiefly in Sydney and Melbourne, the inhabitants of which numbered at the latest date 438,300 and 477,790 respectively, that the density of settlement has necessitated the general adoption of this mode of transit.

In New South Wales the three systems of electric, cable, and steam traction are in vogue. Within the metropolitan area, however, it has been decided to substitute electric for steam power, and the conversion is now being made. The length of line under electric traction on the 30th June, 1900, was 20¼ miles, comprising 10¼ miles at North Sydney; 1¼ mile from Ocean-street, Woollahra, to Rose Bay; 3 miles 19 chains on the George-street–Harris-street tramway; and 5½ miles to Marrickville, Dulwich Hill, and St. Peters. The only line worked by cable traction is that from King-street, Sydney, to Ocean-street, in the suburb of Woollahra, a distance of 2½ miles. On the remaining lines steam motors are still used. The length of Government tram lines open to 30th June, 1900, was 71¼ miles, which had cost for construction and equipment £1,924,720. The receipts for the year were £409,724, and the working expenses £341,127, leaving a profit of £68,597, or 3·56 per cent. on the invested capital. The number of passengers carried during 1900 was 66,244,334.

In Victoria the cable system is in operation in the metropolitan area, the lines having been constructed by a municipal trust at a cost of £1,705,794. The tramways are leased to a company, and the receipts for the year ended 30th June, 1900, were £456,654. The number of passengers carried during the year was 41,661,580. The miles of track operated on were 43½ cable and 4½ horse lines, or 48 miles of double track.

In Queensland there is a system of electric trams controlled by a private company. No information regarding liabilities is available since 30th September, 1895, when they were set down at £166,218, and the assets to 30th September, 1896, the latest date available, were shown at £131,542. The receipts for the year ended 30th September, 1897, the latest available, were £30,299; and the expenses, including depreciation, £26,304. The length of the tramways is 22½ miles, or 36 miles of single line. The company owned fifty-eight electric cars, and during the year ended 30th September, 1899, 9,938,307 passengers were carried.

In South Australia there are no Government tramways, but horse trams are run in the principal streets of Adelaide by private companies. No particulars have been collected respecting the length of the lines, nor of the returns therefrom. A proposal is under consideration for the substitution of electric traction on these lines.

The Western Australian Government owns a line of horse tramway on a 2-foot gauge between Roeburne and Cossack, a length of 8½ miles,

constructed at a cost of £23,352. For the year ended 30th June, 1900, the gross earnings were £2,131, and the working expenses £2,889, leaving the loss on working expenses at £758.

In Hobart there is an electric tramway about 9 miles in length, owned by a private company. The cost of construction and equipment was £90,000 ; and the company possesses 20 cars, of which the average number in use is 12. For the year ended 31st December, 1899, the receipts amounted to £12,459, and the working expenses, excluding directors' fees, to £8,940. The passengers carried during the twelve months numbered 1,284,552. There is also a steam system 2 miles in length, constructed at a cost of £3,212. No information is available as to the receipts for the year ended 31st December, 1899, but the working expenses were £1,948. The number of passengers carried during the twelve months was 24,219.

There are also tramways in existence in New Zealand under private management, but no particulars in regard to them are at present available.

POSTS AND TELEGRAPHS.

THE first Australasian post-office was established by Governor Macquarie in the year 1810, Mr. Isaac Nichols being appointed Postmaster. The office was in High-street (now known as George-street), Sydney, at the residence of Mr. Nichols, who was, "in consideration of the trouble and expense attendant upon this duty," allowed to charge on delivery to the addressee 8d. for every English or foreign letter of whatever weight, and for every parcel weighing not more than 20 lb., 1s. 6d., and exceeding that weight, 3s. The charge on Colonial letters was 4d., irrespective of weight; and soldiers' letters, or those addressed to their wives, were charged 1d. Very little improvement in regard to postal matters took place for some years.

In 1825 an Act was passed by Sir Thomas Brisbane, with the advice of the Council, "to regulate the postage of letters in New South Wales," giving power for the establishment of post-offices, and to fix the rates of postage. It was not, however, until 1828 that the provisions of the Act were put into full force. The rates of postage appear to have depended upon the distance and the difficulty of transmission. The lowest single inland rate was 3d., and the highest 12d., the postage on a letter increasing according to its weight, which was fixed for a single letter at $\frac{1}{4}$-ounce. Letters between New South Wales and Van Diemen's Land were charged 3d. each (ship rate), and newspapers 1d. Other ship letters were charged 4d. single rate, and 6d. for any weight in excess. The privilege of franking was allowed to the Governor and a number of the chief public officials, and letters to and from convicts passed free under certain regulations.

In 1831 a twopenny post was established in Sydney; and in 1835, under Sir Richard Bourke, the Act of 1825 was repealed and another Act was passed, fixing the charge on a single letter at 4d. for 15 miles, 5d. for 20 miles, 6d. for 30 miles, and so on up to 1s. for 300 miles. In 1837 a post-office was established in Melbourne, and a fortnightly mail was established between that city and Sydney. Stamps were introduced in the same year in the shape of stamped covers or envelopes, which are believed to have been the first postage-stamps ever issued. By 1838 there were 40 post-offices in the colony of New South Wales, which at that time, of course, included the territory now known

as Victoria and Queensland; and in the Sydney office about 15 persons were employed. The revenue of the Department for the year was £8,390, and the expenditure £10,347; while payments were made by the New South Wales Government to the post office at Korraika, in New Zealand, which was not created a separate colony until 1841. In 1847 an overland mail between Sydney and Adelaide was established. Stamps in their present form were issued in 1849, and the postage rates were fixed at 1d. per ½ oz. for town and 2d. for country letters, at which they remain in most of the colonies to-day.

Regular steam mail communication with Great Britain was first established in 1852. Until that time the Australian colonies had to depend upon the irregular arrival and despatch of sailing vessels for the carriage of mails; but in the year mentioned the steamships Australia, Chusan, and Great Britain were despatched from England, making the voyage in 60 days, and causing a strong desire in the minds of the colonists for a more frequent and steady system of steam communication with the Old World. The outbreak of the Crimean War in 1854 hindered for a while the accomplishment of this object; but in 1856 a line of steamers was again laid on, and the service was carried on by the Peninsular and Oriental Company and the Royal Mail Company for some years, but without giving so much satisfaction to the public as might have been expected.

As far back as 1854 a proposal was made for the establishment of a line of mail packets *via* Panama, and negotiations on the subject were carried on for several years between the British Government and the Governments of New South Wales and New Zealand. The result was that in 1866 the service was started, and continued in operation until the end of 1868, when it was terminated through the failure of the company by which it had been carried out. In the following year New South Wales, in conjunction with New Zealand, inaugurated a mail service *via* San Francisco, which, with a few interruptions and under various conditions, has been continued up to the present time.

The establishment of a mail route *via* America had the effect of stimulating the steamship-owners who were engaged in the service *via* Suez, and from that time there was a marked improvement in the steamers employed, as well as in the punctuality and speed with which the mails were delivered. The Peninsular and Oriental Company have carried mails for the colonies almost from the inception of the ocean steam service, with very few interruptions. Towards the end of 1878 the Orient Company commenced carrying mails between Australia and the United Kingdom, and have continued to do so ever since. In the year 1883 the fine steamers of the Messageries Maritimes of France entered the service, followed in 1887 by the North German Lloyd's, so that there are now sometimes two or even three mails received and despatched every week, and a voyage to Europe, which was formerly a formidable undertaking, involving great loss of time and much discomfort, is regarded as a mere pleasure trip to fill up a holiday.

In the year 1893 another mail service was established, by a line of steamers running from Sydney to Vancouver Island, in British Columbia. This line seems likely to open up a valuable trade between the Australian colonies and British North America. There is also a line of steamers running between Brisbane and London, but the colonies other than Queensland make little use of these vessels.

Growth of Postal Business.

The growth of postal business in each of the colonies during the thirty-nine years from 1861 to 1899 is shown below. It will be seen that the number of letters for all Australasia in 1861 was less than is now transacted by any individual colony, Tasmania and Western Australia excepted. The true total for Australasia is, of course, not to be found by adding the figures of the several colonies together, as intercolonial letters are counted both in the colony from which they are despatched and in that in which they are received for delivery. A second total is therefore given from which this excess has been excluded :—

State.	Post Offices.		Letters and Post-cards.		Newspapers.		Packets.	
	1861.	1899.	1861.	1899.	1861.	1899.	1861.	1899.
New South Wales....	340	2,152	4,369,463	76,726,700	3,384,245	46,806,600	105,338	13,986,600
Victoria	369	1,593	6,109,929	77,796,600	4,277,179	23,614,200	....	10,957,900
Queensland	24	1,239	515,211	21,181,300	427,489	11,633,300	3,555	5,779,000
South Australia	160	692	1,540,472	19,765,400	1,089,424	8,937,000	....	1,531,400
Western Australia ..	..	168	193,317	12,973,600	137,476	6,287,000	....	3,016,000
Tasmania	100	355	835,873	10,036,600	895,656	6,293,000	....	1,811,300
Commonwealth ..	..	6,199	13,564,265	218,480,200	10,211,469	103,571,100	....	37,082,200
Commonwealth (excluding Inter-State excess)	..	..	12,844,300	199,338,100	9,603,000	91,577,000	....	33,814,800
New Zealand	..	1,620	1,236,768	40,127,400	1,428,351	15,717,400	....	17,883,200
Australasia.....	..	7,819	14,801,033	258,607,600	11,639,820	119,288,500	....	54,965,400
Australasia (excluding intercolonial excess)	..	..	14,061,000	238,253,200	10,941,400	106,165,400	....	51,500,800

A corresponding table to that already given, showing the number of letters, newspapers, and packets per head of population, is appended :—

State.	Letters and Post-cards.		Newspapers.		Packets.	
	1861.	1899.	1861.	1899.	1861.	1899.
New South Wales	12	57	10	35	1	10
Victoria	11	67	8	20	.....	9
Queensland	17	44	14	24	1	12
South Australia	13	54	9	24	.....	4
Western Australia	12	76	9	37	.....	18
Tasmania	9	56	10	35	.....	10
Commonwealth.....	11	54	8	25	.....	9
New Zealand	14	54	16	21	.....	24
Australasia*	11	54	9	24	.....	12

* Intercolonial excess excluded.

Western Australia takes the lead in the transmission of letters and newspapers, and is only surpassed by New Zealand in the matter of packets ; while Victoria in letters and postcards, and New South Wales and Tasmania in newspapers come second. A comparison of the average number of letters and postcards per head of population in Australasia with similar figures for the principal countries of the world is afforded by the table given below. It will be seen that on a population basis the correspondence of Australasia exceeds that of any of the countries named, with the exception of the United Kingdom :—

Country.	Letters and Post-cards per head.	Country.	Letters and Post-cards per head.
United Kingdom.....	67	France	27
Australasia	54	Norway	23
Switzerland.....	47	Hungary.....	14
Germany.....	42	Portugal.....	13
Sweden.....	41	Italy	8
Denmark	39	Spain.....	6
Austria	37	Roumania.....	5
Canada.....	31	Chili	5
Belgium	30	Greece	4
Argentine Republic ...	28	Russia	4
Netherlands	28		

Rates of Postage.

The inland letter postage is 1d. per ½ oz. on town and 2d. on country letters in all the colonies except Victoria and South Australia, where the charge is 2d. per oz. and ½ oz. respectively on all letters posted for delivery within the colony. In Victoria the minimum charge was in 1890 reduced to 1d.; but the loss was too great, and in 1892 the rate was again raised to 2d., at which it still remains. In New South Wales the city and suburban rate of 1d. per ½ oz. has been extended to nearly sixty of the principal country towns. The intercolonial rate is uniformly 2d. per ½ oz. in Australasia. It has been determined in New Zealand to introduce a universal penny postage on 1st January, 1901.

The most liberal inland newspaper rates are to be found in New South Wales, Western Australia, and Tasmania, where newspapers printed within the colony are transmitted free if posted within one week of publication, although in New South Wales the maximum weight allowed free postage is 10 oz. It is, therefore, only natural that those colonies, as shown in the table given on page 705, should exceed their neighbours in the average number of newspapers carried per head of population. In Victoria and New Zealand the charge is ½d. each, and in South Australia and Queensland ½d. per 10 oz. The intercolonial postage on newspapers is ½d. per 10 oz. in New South Wales, Victoria, South Australia, and Western Australia, and 1d. each in New Zealand, to all colonies except Queensland, to which province the charge is ½d. for every 2 oz. In Tasmania newspapers posted to Western Australia and New Zealand are carried free if posted within seven days of publication; to Queensland the charge is ½d. for every 2 oz.; and to the other colonies, ½d. each. In Queensland the uniform charge to the other provinces is ½d. per 2 oz.

Registered Letters.

The number of registered letters and packets passing through the post-offices of the Australasian colonies has largely increased of late years. In New South Wales the number of such letters in 1899 was 830,576. This number has been exceeded in previous years, for instance in 1892, when the number was 1,075,241, but this total was largely made up of correspondence relating to so-called "consultations," or lottery sweeps connected with horse-racing, which were established in Sydney, and to support which large sums of money were sent to that city from all parts of Australasia, as well as from other countries. Probably not less than 600,000 of the total for New South Wales in 1892 were associated with these lotteries. The Government of that colony dealt with the evil in an amending

Postal Bill in 1893, and this illicit branch of the postal traffic was removed to Queensland, where the number of registered letters at once greatly increased, and numbered 541,148 in 1895. But in 1896 the Parliament of Queensland passed an Act making these lotteries illegal, and the evil was transferred to Hobart, the registrations in the northern colony in 1899 numbering only 235,155. In South Australia 584,532 registered letters were dealt with during the year. In Western Australia 218,254 registered letters and packets were passed through the head office; while in New Zealand the registered articles dealt with numbered 489,137. For Victoria and Tasmania no particulars of registrations are available.

Parcels Posts.

Excepting Western Australia, where there was no inland service, there were inland, intercolonial, and international parcels posts in operation in 1899; but statistics of the services on a uniform basis are not obtainable. During the year 654,474 parcels, weighing 2,392,593 lb., and having a value of £418,092, passed through the post-office of New South Wales, the postage collected amounting to £42,091; in Victoria 192,716 parcels, yielding a revenue of £9,737, were dealt with; in Queensland the number of parcels which passed through the post-office was 233,009, weighing 1,001,544 lb., and the revenue derived from the service amounted to £16,080; in South Australia 39,655 parcels weighing 100,857 lb. were forwarded and the revenue received was £2,620; in Western Australia 31,795 parcels, the declared value of which was £41,364, and which yielded a revenue of £887, were dealt with; in Tasmania 11,640 inland and 2,845 ship parcels were posted during the year, while 15,665 packets and parcels, valued at £19,666, were received from the United Kingdom and the other colonies; and in New Zealand the parcels dealt with numbered 223,350, weighing 765,836 lb., of which 30,207, weighing 99,438 lb., and valued at £70,094, were received from places outside the colony; and 9,576, weighing 23,188 lb., and valued at £10,806, were despatched from the colony.

Money Orders and Postal Notes.

In all the colonies there are money order and postal note systems in operation, and in all the colonies except Victoria, Queensland, and South Australia post-office savings banks. In Queensland there is a Government Savings Bank, but it is not placed under the administration of the Postmaster-General. The Victorian Post Office Savings Bank was amalgamated with the Commissioners' Savings Bank in September, 1897. Particulars of the working of these services will be found in the chapter dealing with Private Finance.

Postal Facilities.

The following table shows the number of inhabitants and the area in square miles to each post-office for the year 1899. It will be seen that the most sparsely populated colonies have the greatest number of post-offices in comparison with their population, but in order to judge of the relative extension of postal facilities the area of country to each office must also be taken into account:—

State.	Number of Inhabitants to each Post Office.	Number of Square Miles of Territory to each Office.
New South Wales	625	144
Victoria	729	55
Queensland	385	540
South Australia	532	1,306
Western Australia	1,009	5,809
Tasmania	506	74
Commonwealth	597	480
New Zealand	463	64
Australasia	569	394

Ocean Mail Services.

The Federal Ocean Mail Service, which is carried on by the Orient and Peninsular and Oriental Steam Navigation Companies, is subsidised by the United Kingdom and all the Australasian colonies, with the exception of New Zealand. New contracts were entered into on the 1st February, 1898, for a period of seven years. The total amount of the subsidy is £170,000, of which £98,000 is payable by the Imperial authorities and £72,000 by the colonies in proportion to their population. The sea transit rates collected from other countries and colonies making use of the service are credited to the Imperial and Colonial Governments in proportion to the amount of their contribution towards the subsidy. The following table shows the amount of the subsidy payable by each of the colonies during 1899, on the basis of the population at the end of the preceding year. In addition to the subsidy, there are other charges in connection with the service, such as transit rates in France and Italy and in Australia. After adding these, and deducting the postages collected in the colonies, and the proportion of sea transit rates payable by other countries using the service, the net cost to New South Wales in 1899 was £5,936, and to Victoria £378, as shown in

the table given below. For the other colonies, the net cost of the service is not obtainable. New Zealand, although not a contracting party, yet avails itself of the Federal Service for the carriage of mail matter, and its net loss during the year amounted to £1,552 :—

	Subsidy, 1899.	Net Cost, 1899.
United Kingdom	£98,000	.....
Australasia—		
New South Wales.....	£25,955	£5,936
Victoria	22,696	378
Queensland.....	9,603	.....
South Australia.....	7,095	.....
Western Australia	3,236	.....
Tasmania	3,415	.....
	£72,000	.....
Total	£170,000	.....

The mail service has been performed with great regularity and expedition. The average time occupied by the outward and homeward services in 1899 was as follows :—

	Orient.	P. and O.
London to Sydney	$33\frac{3}{13}$ days.	$32\frac{5}{26}$ days.
Sydney to London	$32\frac{23}{26}$,,	$32\frac{6}{13}$,,

On several occasions the mails from London have been delivered in Sydney in 32 days.

In addition to the Federal Ocean Mail Service *via* Suez, New South Wales and New Zealand until November, 1890, subsidised the Union Steamship Company, in conjunction with the Pacific Steamship Company, for a four-weekly service *via* San Francisco, to the amount of £37,000, of which New South Wales paid £25,750, and New Zealand £11,250. Under the new contract which was entered into, the amount of the subsidy was largely reduced, the contribution being based on the weight of mail matter carried, and New South Wales made an annual payment of £4,000 to the New Zealand Government, subject to appropriation by Parliament. Various extensions of the contract have been made, and at present the New Zealand Government guarantees a minimum payment of £7,500. During the year 1899 the net cost of the service to New Zealand was £10,745; to New South Wales, £1,985; and to Victoria, £331. The average time occupied in carrying the mails by the San Francisco route during the same year was as follows :—

London to Sydney.....	$36\frac{1}{13}$ days.
Sydney to London.....	$36\frac{1}{13}$,,

During 1893 a calendar monthly service between Sydney and Vancouver was established by the Canadian-Australian Royal Mail Line,

the colony of New South Wales granting an annual subsidy of £10,000, and the Canadian Dominion one of £25,000. This action was taken more in the interests of trade between the great British colonies in Australasia and America than in those of the postal service. The Government of New Zealand guaranteed a minimum payment of £7,500 annually to this line in consideration of Wellington being made a port of call. But on the expiry of this contract on the 31st March, 1899, a fresh agreement to hold for four years was made by the Shipping Company with the Governments of New South Wales and Queensland by which Brisbane was substituted for Wellington as a port of call, on condition that Queensland paid a subsidy of £7,500. New Zealand, therefore, does not now subscribe to the Vancouver service. During 1899 the net cost of the Vancouver service to New South Wales was £7,345 ; and to Victoria, £708. The average time occupied by the mails in transit from Sydney to London was 37$\frac{5}{6}$ days.

The Queensland line of steamers, sailing from Brisbane *via* Torres Straits, carry mails for the Queensland Government, payment being made according to weight. This route is from four to ten days longer than those previously mentioned. Queensland, under a former contract, paid the company an annual subsidy of £55,000. This arrangement ceased in January, 1890, and under a new contract the colony agreed to pay the company an annual subsidy of £19,800 for a four-weekly, or £32,500 for a fortnightly service. The latter service was commenced on 1st July, 1890, the monthly service having lasted nearly six months ; but in November, 1891, the contractors, on account of the heavy losses under the fortnightly system, were allowed to revert to the four-weekly service, the subsidy being reduced to the smaller amount mentioned above, viz., £19,800. When the contract expired, an agreement was arrived at for the institution of a subsidised service for purely commercial purposes. This arrangement lasted but a short time, when the subsidy was abandoned by the shipping company, who preferred to run their steamers without restriction. Payment is now only made in accordance with the weight of the mails carried. The amount of mail matter despatched from the other colonies by the Torres Straits route is very small.

Besides those mentioned, the other steamship companies trading with the Australasian colonies carry mails, notably the Messageries Maritimes Company and the North German Lloyd's, sailing from Sydney ; and the Shaw, Saville, and Albion Company, and the New Zealand Shipping Company, sailing from Lyttelton, *via* Magellan Straits. The companies are paid by the colonies in proportion to the weight of mail matter carried, but the Messageries Maritimes Company and the North German Lloyd's are in receipt of large subsidies from the French and German Governments respectively.

The postage to the United Kingdom was reduced in January, 1891, from 6d. per $\frac{1}{2}$ ounce *via* Italy and 4d. *via* the long sea route to the

uniform rate of 2½d. In 1891 the colonies were represented at the Congress of the Universal Postal Union held in Vienna, and on July 4 a convention was signed on their behalf, by which they joined the Union from the 1st October of that year. From that date the rate of postage to all British colonies and possessions and foreign countries included in the Union was reduced to 2½d.

A common scale of postage on newspapers to the United Kingdom and foreign countries has been adopted by the Australasian colonies, the rate being 1d. for the first 4 ounces, and ½d. for every additional 2 ounces.

TELEGRAPHS.

The electric telegraph was introduced into these colonies almost at the time of the earliest railway construction. The first telegraph messages were sent in New South Wales in 1851. In Victoria the telegraph line from Melbourne to Williamstown was opened in 1854. The first line in South Australia, from Adelaide to Port Adelaide, was opened in 1856; and the first Tasmanian line was completed in 1857. In New Zealand the first telegraph office was opened in 1862; and the line from Brisbane to Rockhampton, the first in Queensland, was opened in 1864. Telegraphic communication was established between Sydney, Melbourne, and Adelaide in 1858. The first telegraph in Western Australia was opened in 1869, and communication between that colony and all the others of the group was completed in 1877.

All the colonies show very rapid progress in regard to telegraphic matters during the period from 1871 to 1881. In the case of Queensland this increase was largely a result of the construction of the line to the Gulf of Carpentaria; and in the case of South Australia, to the construction of the lines to Port Darwin and to Eucla, on the boundary of Western Australia. The following table shows the length of telegraphic lines in each colony at the last four census periods, as well as for the year 1899, as far as the returns are available:—

State.	1861.	1871.	1881.	1891.	1899.
New South Wales ...	1,616	*4,674	8,515	11,697	13,663
Victoria	.....	*2,295	3,350	6,840	6,747
Queensland	169	2,525	6,280	9,996	10,202
South Australia	597	1,183	4,946	5,640	5,691
Western Australia ...	.....	*550	1,585	2,921	5,941
Tasmania	.....	*291	928	2,082	2,000
Commonwealth...	.....	11,518	25,604	39,176	44,244
New Zealand.....	.....	2,015	3,824	5,349	6,910
Australasia	.....	13,533	29,428	44,525	51,154

* In 1873.

The next table gives similar particulars, but the figures represent miles of wire instead of miles of line :—

State.	1861.	1871.	1881.	1891.	1899.
New South Wales.....	1,981	5,579	14,278	24,780	38,718
Victoria.....	.....	3,472	6,626	13,989	15,125
Queensland	169	2,614	8,585	17,646	18,969
South Australia	915	1,718	7,228	12,707†	13,596
Western Australia ...	.....	*750	1,593	3,546	8,749
Tasmania	.....	241	1,157	3,178	3,252
Commonwealth ..	.....	14,374	39,467	75,846	98,409
New Zealand.....	.....	3,287	9,653	13,235	19,228
Australasia	.....	17,661	49,120	89,081	117,637

* In 1873. † Including telephone wires.

The number of telegrams passing along the wires of each colony and the revenue received by the Telegraph Departments during the year 1899 were as appended. In the total for Australasia a correction has been made for intercolonial telegrams recorded in both the despatching and the receiving colony :—

State.	Number of Telegrams.	Revenue received.
		£
New South Wales	3,112,063	168,758
Victoria	2,320,298	107,988
Queensland	1,541,096	85,500
South Australia	1,237,008	116,135
Western Australia.....	1,136,513	81,365
Tasmania	379,377	17,932
Commonwealth	9,726,355	577,678
Do (Inter-State excess excluded).	8,124,000	.....
New Zealand	3,589,777	119,642
Australasia	13,316,132	697,320
Do (Intercolonial excess excluded).	11,653,800	.....

In the whole of Australasia there were on 31st December, 1899, 3,831 telegraph stations, of which 945 were in New South Wales, 805

in Victoria, 456 in Queensland, 280 in South Australia, 155 in Western Australia, 275 in Tasmania, and 915 in New Zealand.

In no country in the world has the development of telegraphic communication been so rapid as in Australasia, and in none has it been taken advantage of by the public to anything like the same extent. Taking Australasia as a whole, there are only four countries that possess a greater extent of telegraph lines, and only seven in which a larger number of messages is actually sent. In no other country, however, except the United Kingdom, does the number of messages bear anything approaching the same ratio to the population. The following table illustrates these remarks:—

Country.	Length of Telegraph Lines.	Messages.	Messages per head of population.
	miles.	No.	No.
United Kingdom	43,803	87,043,652	2·3
France	62,952	44,515,175	1·2
Belgium	3,961	6,119,111	0·9
Netherlands*	3,671	4,957,691	1·0
Germany	90,760	44,885,733	0·8
Denmark	3,623	1,953,100	0·9
Sweden	5,442	2,294,809	0·4
Norway	7,481	2,049,458	0·9
Austria-Hungary	44,858	21,328,258	0·5
Switzerland	4,436	3,820,320	1·2
Italy	26,085	8,701,414	0·3
Spain	17,883	5,433,362	0·3
Portugal	4,584	3,095,477	0·6
Russia	90,383	16,371,288	0·2
Roumania	4,290	2,586,534	0·4
United States†	189,856	61,398,157	1·0
Canada	32,538	4,449,765	0·8
Cape Colony	7,224	2,321,082	1·5
Argentine Republic	25,345	4,953,887	1·3
Commonwealth of Australia	44,244	8,124,000	2·2
Australasia	51,154	11,653,000	2·6

* Government lines only. † Western Union Company only.

From the above table it appears that in Australasia during the year over two and a half messages were sent over the telegraph for each inhabitant. In the United Kingdom the number was two and three-tenths for each inhabitant; and in the United States of America about one message to every inhabitant. The return for the United States, however, includes only the lines of the Western Union Company, which owns the principal part of the telegraph system of that country. The other countries shown in the table sent messages ranging from one and a half per inhabitant in the case of Cape Colony, to one-fifth per inhabitant in the case of Russia.

Cable Services.

Australasia is in telegraphic communication with Europe and the rest of the world by means of three cables connecting with the various Asiatic continental lines. The first of these cables, which were all laid by the Eastern Extension Telegraph Company, Limited, was opened in October, 1872, joining Port Darwin to Banjoewangie, in Java, whence communication is provided with Europe by way of Batavia, Singapore, Madras, and Bombay. In 1879 a duplicate cable was laid down, the colonies of New South Wales, Victoria, South Australia, Western Australia, and Tasmania agreeing to pay the company a subsidy of £32,400 per annum for a period of 20 years, the amount to be apportioned between the colonies on the basis of population. At Port Darwin the cables connect with an overland wire, which extends to Adelaide, a distance of 1,971 miles, and to construct which cost the South Australian Government about half a million sterling. The total length of line between Adelaide and London is 12,570 miles, of which 9,146 miles are submarine cable, and 3,424 miles overland wire. The third cable was laid in 1888 from Broome, in Roebuck Bay, Western Australia, to Banjoewangie. The length of line by this route from Perth to London is 12,296 miles, 10,811 being cable and 1,485 land wire. The eastern colonies are connected with Broome by a line running from Adelaide, *via* Port Augusta, Eucla, and Albany, to Perth.

The cable joining Tasmania to the continent of Australia was laid in 1869, the length being about 170 miles. It starts from the township of Flinders, near Cape Schanck, in Victoria, and terminates at Low Head, at the mouth of the Tamar, in Tasmania. This line is subsidised to the extent of £4,200 yearly by the colonies of New South Wales, Victoria, South Australia, Western Australia, and Tasmania, the contributions being based on the population figures.

New Zealand was joined to the continent by a cable laid in 1876, the length being about 1,191 miles. The line has its Australian terminus within sight of the spot where Captain Cook landed on the shores of Botany Bay, and within a stone's throw of the monument of La Perouse. The New Zealand terminus of the cable is at Wakapuaka, near Nelson, on the Middle or South Island, whence another cable, 109 miles in length, is laid to Wanganui, in the North Island, with an alternate line from White's Bay across Cook Strait to Wellington. For the first ten years after its opening, the New Zealand cable was subsidised by the Governments of New South Wales and New Zealand, their annual contributions being £2,500 and £7,500 respectively. Under agreement, dating from the 1st January, 1893, the Company which laid the cable was guaranteed £26,258 per annum in return for the reduction of the cable rates from 8s. 6d. for the first ten words and 10d. for every additional word to 2s. and 3d. respectively, the Company to bear one-fourth of any loss. On the 1st May, 1885, an amended agreement

came into operation under which the guarantee was reduced to £20,000, and the Company ceased to share in any loss. This agreement expired on the 30th April, 1900, and the Company in proposing a renewal claimed that the guarantee should be increased to £26,000. This was absolutely declined by New Zealand, and the Company then determined on a uniform word rate of 3d., and abolished the minimum charge of 2s. for the first ten words. This was agreed to pending the laying of the Pacific Cable.

A cable connecting New Caledonia with Queensland at Bundaberg was opened in October, 1893. It was constructed by a French company, and is guaranteed by the French Government to the extent of £8,000, and by the colonies of New South Wales and Queensland to the amount of £2,000 each annually for a period of thirty years, in return for which the Governments of these colonies are entitled to use the cable for the transmission of official messages up to the amount of the guarantee.

During the year 1890 the colonies opened negotiations with the Eastern Extension Telegraph Company for a reduction in the cable rates to Europe, which at that time were 9s. 4d. per word for ordinary messages and 2s. 8d. per word for press messages sent from New South Wales; and at a conference of the postal and telegraphic authorities a proposal to reduce the tariff to 4s. per word for ordinary messages and 1s. 10d. per word for press messages was agreed to, the colonies contributing to the subsidy undertaking to make good half the loss which the company would sustain by this reduction in the schedule of charges, and New South Wales, Victoria, Western Australia, Tasmania, and New Zealand at the same time agreeing to pay to South Australia a proportion of the loss to the revenue of that colony which the lower charges would cause in the working of the overland wires. The amended tariff came into force in May, 1891, and the amount to be guaranteed to the company for the portion of the year during which the contract was in existence was £158,491. The sum earned by the company for the same period was £120,141, so that the deficiency on the eight months' business was £38,350, one-half of which was made good by the contributing colonies according to population. But this sum, combined with the amount of the subsidy, was more than the colonies were prepared to bear, and on the 1st January, 1893, the rates were fixed at 4s. 11d. per word from Sydney to London for ordinary messages, and 1s. 10d. for press messages. Even at these charges there was a loss to be borne, the total amount payable to the cable company being £21,778 in 1893 (as compared with £27,520 in 1892), and £6,191 in 1894; and to the South Australian Government £7,675 in 1893 (as compared with £10,415 in 1892), £822 in 1894, and £1,125 in 1895. Since the years mentioned the amounts guaranteed—£227,000 to the cable company, and £37,552 to the South Australian Government—have been met by the revenue, and the colonies have therefore not been called upon to contribute. Queensland later joined the other colonies in the guarantee.

The agreement between the Australian Governments and the Company expired on 30th April, 1900. In July, 1899, the Company offered to lay a cable to Australia, *via* the Cape of Good Hope, to reduce the tariff per word from 4s. 11d. to 4s. at once, and later to 2s. 6d. under a sliding scale, if the colonies would agree to certain stipulations. South Australia, Western Australia, and Tasmania accepted the terms offered and now enjoy the reduced rates. The other colonies refused, but notified the Company that they also would accept if certain alterations were made in the agreement, these alterations being intended to safeguard the Pacific cable, to which these colonies were definitely committed. As the Company has not yet made the required alterations, the matter is still in abeyance.

The following table shows the amount paid by each colony towards cable subsidies and guarantees during the year 1899. The proportions are based on the 1891 census populations. The Port Darwin-Banjoewangie payment was for ten months only, as the subsidy agreement terminated on the 31st October, 1899 :—

State.	Port Darwin–Banjoewangie Subsidy.	Victoria–Tasmania Subsidy.	New South Wales–New Zealand Guarantee.	Queensland–New Caledonia Guarantee.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	11,169 8 3	1,493 17 8	237 11 3	2,000 0 0	14,900 17 2
Victoria	10,112 16 5	1,504 13 3	239 5 7	.....	11,856 15 3
Queensland	.....	519 9 6	82 12 2	2,000 0 0	2,602 1 8
South Australia	3,100 11 9	422 15 7	67 4 8	.....	3,590 12 0
Western Australia	1,187 7 4	65 13 8	30 15 6	.....	1,283 16 6
Tasmania	1,429 16 3	193 10 4	10 8 11	.....	1,633 15 6
New Zealand	.....	.....	529 1 11	.....	529 1 11
Total	27,000 0 0	4,200 0 0	1,197 0 0	4,000 0 0	36,397 0 0

The desirability of constructing a Pacific cable, which shall touch only British territory on its way from Australia to America, is acknowledged by the Governments of most of the Australasian colonies as well as by those of the United Kingdom and Canada, and an informal Conference was held in London in July, 1898, of representatives of Great Britain, Canada, New South Wales, Victoria, Queensland, South Australia, and New Zealand, when it was suggested that Great Britain should pay one-third of the cost of laying such a cable, Canada two-ninths, and the Australian colonies the remaining four-ninths. This proposal was eventually adopted, and in July, 1899, a meeting was held in London by the representatives of the countries interested, and it was

agreed that the cable should be laid and that the capital necessary to construct and manage it should be raised and controlled by a Board of Commissioners selected by the contributing Governments. A tender of £1,975,000 for laying the cable has been accepted by the committee acting on behalf of the Governments concerned, the work to be completed within eighteen months.

TELEPHONES.

In connection with the telegraph departments of the various colonies, telephone exchanges have been established in the capitals and other important centres of population. In order to popularise the use of the instrument, the charges in some of the colonies have within the last few years been reduced, and the result is seen in a satisfactory extension of this means of communication. Information regarding telephones in the different colonies during 1899, as far as can be ascertained, will be found in the following table :—

State.	Exchanges.	Telephones.	Length of Telephone Wires.	Revenue.
	No.	No.	miles.	£
New South Wales	38	10,119	.....*	60,429
Victoria	15	4,409	13,591	47,919
Queensland.....	11	2,157	3,108	12,574
South Australia..	10	1,320	3,304	18,171
Western Australia	10	2,115	2,869	20,705
Tasmania.....	5	1,010	815	4,285
Commonwealth	89	21,130	.....	164,083
New Zealand	40	7,150	6,343	43,303
Australasia	129	28,280	.....	207,386

*Not ascertained.

In the Australasian colonies the rates for telephones at places of business range from £5 to £10 for the minimum length of wire—generally one mile, the colonies with a half-mile radius being New Zealand and Queensland—and the charge is higher in the city than in the country. In New South Wales and Victoria the city and suburban rates are £9 per annum, and the country rates, £8. In South Australia the city rate is higher, being £10 ; but in the suburbs and country the rates range from £6 to £8. Queensland, for a radius of half-a-mile, has a uniform rate of £6, which is also the charge made in Tasmania, for a one mile radius, in Hobart, Launceston, and Zeehan, while for the suburbs and country districts the rate is a matter of arrangement. In New

Zealand a distinction is drawn between exchanges continuously open and those not continuously open, the charges being respectively £7 and £5; while in Western Australia, in the towns of Perth, Fremantle, and Guildford, the rate is £7, and £10 where the exchange has less than 100 subscribers. The charges for telephones at private residences is, of course, less than for places of business. In New South Wales, Victoria, and New Zealand, the rate is uniformly £5; and in Queensland, £6. In South Australia the charge is £6 for the city, and from £6 to £8 in the suburbs and country; in Tasmania, it is £4 10s. in Hobart, Launceston, and Zeehan, and a matter of arrangement in the suburbs and country; while in Western Australia, at Perth, Fremantle, and Guildford, the charge is £5, and £6 where the exchange has less than 100 subscribers.

Postal and Telegraphic Finances.

The following table shows the revenue and expenditure of the Postal and Telegraph Departments of the colonies during 1899 :—

State.	Revenue.				Expenditure.
	Posts.	Telegraphs.	Telephones.	Total.	
	£	£	£	£	£
New South Wales	560,471	168,758	60,429	789,658	758,606
Victoria	451,050	107,988	47,919	606,957	554,588
Queensland	200,726	85,500	12,575	298,801	347,713
South Australia	134,709	116,135	18,171	269,015	207,340
Western Australia	101,892	81,365	20,705	203,962	230,700
Tasmania	78,055	17,932	4,285	100,272	78,095
Commonwealth	1,526,903	577,678	164,084	2,268,665	2,177,042
New Zealand	325,301	119,642	43,303	488,246	390,448
Australasia	1,852,204	697,320	207,387	2,756,911	2,567,490

With the exception of New South Wales, Victoria, and New Zealand, the revenues set down are only approximate, as the receipts for postage are merged with those for stamp duty under the general heading of fees. In the other colonies postage stamps are also used for the purpose of stamping acknowledgments for the receipt of money. During 1899 the New South Wales Post Office made an allowance of £24,000 on this account. In the expenditure shown in the table, interest on the outlay on post-office buildings and telegraph lines and maintenance of buildings is not taken into account. If allowance be made for these, as far as is possible from the very imperfect returns concerning the expenditure on

post offices in each colony, the total expenditure and the deficiency in revenue would be as follow :—

State.	Expenditure, inclusive of Interest and Maintenance.	Deficiency in Revenue.
	£	£
New South Wales	869,912	80,254
Victoria.....	653,461	46,504
Queensland	421,049	122,248
South Australia	275,300	6,285
Western Australia	255,025	51,063
Tasmania	86,125	*14,147
Commonwealth...	2,560,872	292,207
New Zealand	460,785	*27,461
Australasia	3,021,657	264,746

* Excess of Revenue.

PRIVATE FINANCE.

THE first century of Australasian history closed on the 26th January, 1888. It is impossible to trace step by step the progress made during that period, as the data for the purpose are for the most part wanting. Sufficient material is, however, available from which a comparative statement of the wealth of the colonies at different periods may be deduced. In the following figures the private wealth of the people has alone been considered, the value of the unsold lands of the State, as well as the value of public works, having been omitted. The table shows the private wealth of the whole of Australasia, and the increase thereof at intervals of twenty-five years from the date when this territory was first colonised :—

Year.	Private Wealth.
	£
1788	Country first colonised.
1813	1,000,000
1838	26,000,000
1863	181,000,000
1888	1,015,000,000
1899	1,079,246,000

Though Australasia has but the population of a province of some of the great European powers, in the wealth and earnings of its people it stands before most of the secondary States, and as regards wealth and income per head of population it compares very favourably with any country.

The plan adopted in valuing the elements of private wealth has been sketched in previous issues of this work, and has not been greatly varied on this occasion. Land, houses, and other improvements thereon, re-

present two-thirds of the private wealth. There are now ample data available for assessing the value of land and improvements, for besides the municipal returns which are available for each colony, there are complete land tax returns for New South Wales, New Zealand, and South Australia. From the data thus to hand, there has been no difficulty in arriving at the value of land separately from its improvements. For all Australasia, the value of land in private hands was in 1899, £421,726,000, out of a total wealth of £1,079,246,000; this represents a proportion of 39 per cent., the proportion varying in each State, as follows :—

State.	Value of Land.	Proportion of total Wealth.
	£	per cent.
New South Wales	143,669,000	40·3
Victoria	108,398,000	40·1
Queensland	34,294,000	31·1
South Australia	27,450,000	40·8
Western Australia	8,554,000	23·0
Tasmania	14,960,000	39·3
Commonwealth	337,325,000	38·3
New Zealand	84,401,000	42·2
Australasia	421,726,000	39·1

The improvements on the lands of the seven colonies are valued at £302,718,000, which sum represents 72 per cent. of the value of the land, and in no instance does the value of the improvements exceed 79 per cent. of the land values. The following are the values of each description of property :—

Classification.	Commonwealth States.	New Zealand.	Total.
	£	£	£
Land	337,325,000	84,401,000	421,726,000
Houses and permanent improvements	248,528,000	54,190,000	302,718,000
Live stock	90,657,000	26,666,000	117,323,000
Furniture and household goods	28,838,000	5,100,000	33,938,000
Personal effects	11,565,000	2,250,000	13,815,000
Machinery and implements of trade, excluding mining machinery	27,348,000	4,856,000	32,204,000
Shipping	5,562,000	1,908,000	7,470,000
Mining properties	32,667,000	3,624,000	36,291,000
Merchandise in store	68,590,000	12,850,000	81,440,000
Coin and bullion	28,3.11000	4,010,000	32,321,000
Total	879,391,000	199,855,000	1,079,246,000

The foregoing gives an average of £242 per inhabitant for Australasia, and £238 for the Commonwealth, which figures show a considerable reduction on those of 1890, when the average for Australasia was not less than £309 per inhabitant. The figures are defective in the sense that they do not take into account property rights, the value of which is not represented by land, buildings, machinery, &c. The case of gas companies may be cited as an example. The total value of the shares of and interests in these companies throughout Australasia is approximately £6,900,000, but in the statement of values of properties given above, the actual property of gas companies appears as value of land, machinery, plant, &c., £4,350,000, no note being taken of value of goodwill and other items which form an appreciable proportion of the value of these works. The actual selling value of the gas undertakings of Australasia is therefore £2,550,000 in excess of the value of their tangible assets, and there are many other cases where a like anomaly exists. For New South Wales it is found that the sum of £18,000,000 might be added to the valuation on this score, and probably a like amount might be added for Victoria, but the data even for these colonies are imperfect, and it has not been considered desirable to take into consideration an item about which there is any uncertainty.

The distribution of the property amongst the various divisions is as follows :—

State.	Value of Property.	
	Total.	Per Inhabitant.
	£	£
New South Wales	356,350,000	265
Victoria	270,309,000	233
Queensland	110,281,000	231
South Australia	67,255,000	183
Western Australia	37,121,000	219
Tasmania	38,075,000	212
Commonwealth	879,391,000	238
New Zealand	199,855,000	266
Australasia	1,079,246,000	242

These figures must, however, be taken with qualification. The foregoing table shows the place where the wealth lies, but gives no indication of the place of residence of the owners. As is well known, residents of Victoria and South Australia have large investments in

New South Wales, Queensland, and Western Australia, while residents of New South Wales are largely interested in Queensland properties, and if it were possible to locate the actual ownership of property throughout Australasia it would probably be found that the holdings both of Victoria and South Australia would be largely increased, and those of the other mainland States correspondingly diminished.

There is another important matter which may be considered at this place. A series of tables, which is elsewhere reproduced, shows that excluding Government borrowings, Australasia stood indebted to British and foreign investors to the extent of £143,002,000, of which £125,386,000 was owing by the Commonwealth States, and £17,616,000 by New Zealand. Comparing these totals with the figures just given, it will be found that absentees own $14\frac{1}{4}$ per cent. of the property in the Commonwealth States, and $8\frac{4}{5}$ per cent. in New Zealand.

It is a somewhat prevalent practice amongst statisticians to make the valuations for probate purposes the basis of their estimates of the wealth of a country. If this course had been followed, it would have appeared that the total wealth of Australasia was £1,272,678,000, and the writer might have pointed out that his estimate was a very moderate one, being some 20 per cent. below the results obtained from the probate returns. No reliance whatever can be placed upon the returns of values of estates assumed for probate purposes, for such returns at best only profess to give the apparent amount of property left by deceased persons, without any allowance for debts. There is, however, some show of reason for using the valuation of estates for stamp duty purposes, and these valuations are far below the values for probate purposes. During the last seven years the probate returns in New South Wales give a total of £38,615,000, while the sworn valuation of the very same estates for stamp duty was £30,488,000, and there can hardly be any doubt that all the other colonies would show similar discrepancies. Nor can any great reliance be placed upon estimates depending upon the amount of stamp duty paid, for, unless the ages of the persons dying are also taken into consideration, such estimates are likely to prove fallacious, and as information concerning the ages of persons dying is not procurable except at excessive trouble, the idea of using the valuations for stamp duty for estimating the amount of wealth in the country has been abandoned. Over and above this, the occurrence at irregular intervals of the deaths of very rich persons, even if the ages had been procurable, would have had a disturbing effect on the calculations, as it can be readily imagined that, where the average number of deaths ranges from only one thousand in Western Australia to sixteen thousand in Victoria, an exceptionally large estate might easily vitiate the average. In support of what is here stated, it may be pointed out that, as estimated by probates, the average wealth per inhabitant in Victoria during five years ranged from £325 to £610, and in New South Wales from £300 to £530. That such was actually the case involves a supposition too ridiculous to be for a moment

entertained. The probate returns, however, have some statistical value, as will presently appear, and the returns for the past five years are, therefore, given below :—

State.	Number of Estates.	Total Value of Estates.	Average Value of Estate left by each Deceased Person leaving Property.
		£	£
New South Wales	11,246	28,702,334	2,552
Victoria	16,174	28,902,216	1,787
Queensland	2,857	6,344,489	2,220
South Australia	3,961	8,912,981	2,252
*Western Australia	824	1,503,408	1,824
Tasmania	1,026	1,302,299	1,269
Commonwealth	36,088	75,667,727	2,097
New Zealand	4,646	9,213,254	1,983
Australasia	40,734	84,880,981	2,084

* Three years only.

Although the probate returns are of little use in indicating the total wealth of the community, they are not without value, as they afford a means, though an inadequate one, of estimating the diffusion of wealth. The following table shows the proportion of persons out of every 100 dying who left estates sufficiently large to be the objects of specific bequest :—

State.	Proportion of Estates per 100 deaths of total population.			
	1880-84.	1885-89.	1890-94.	1898-99.
	per cent.	per cent.	per cent.	per cent.
New South Wales	11·0	11·6	13·2	14·5
Victoria	12·7	13·1	17·3	20·3
Queensland	6·6	8·8	10·2	10·2
South Australia	12·3	15·3	17·4	19·1
Western Australia	10·8	10·7	12·0	11·4
Tasmania	9·6	11·5	11·9	8·5
Commonwealth	11·1	12·0	14·1	16·0
New Zealand	.....	.....	9·4	17·4
Australasia	*11·1	*12·0	14·0	16·2

* Exclusive of New Zealand.

These figures show a distribution of wealth not to be paralleled in any other part of the world; and in a country where so much is said about the poor growing poorer and the rich richer, it is pleasing to find that in the whole population one in six is the possessor of property. Taking the last two years, in Victoria is found the widest diffusion of wealth of the individual colonies; South Australia comes next to Victoria; then come New Zealand, New South Wales, Western Australia, and Queensland; and lastly Tasmania. Too much stress may be laid on the apparently wider distribution of wealth in one colony than in another, for it is obvious that a province with a stationary or decreasing population will naturally come out of a comparison of this kind more favourably than another with a rapidly-increasing population. Taking all things into consideration, the table is highly satisfactory, and should be additionally pleasing from the circumstance that the ratio of distribution has been increasing fairly regularly in every province of the group.

In the United Kingdom, during the five years 1890-94, the last period for which complete returns can be obtained, the number of estates on which legacy duty was paid was 257,351. Making the liberal allowance of one-fourth for successions, of which the number is not given in the *Statistical Abstract*, the total estates would be 321,700, as compared with 3,595,447 deaths, or a little over 8·9 per cent., as against 14·0 per cent. in Australasia during the same period. To show the wide distribution of property in these colonies, the following statement is even more useful than the figures just given. The comparison is made as for every hundred deaths of adult males, and for the same number of deaths of adult males and females. This latter method is undoubtedly the proper basis of comparison, as large numbers of females are possessors of a substantial amount of property :—

State.	Proportion of Estates per 100 deaths of adult males.				Proportion of Estates per 100 deaths of adult males and females.			
	1880-84.	1885-89.	1890-94.	1898-99.	1880-84.	1885-89.	1890-94.	1898-99.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
New South Wales	34·6	37·5	41·2	42·6	22·3	23·8	25·8	26·1
Victoria	38·8	39·7	49·8	57·1	23·4	24·2	30·2	33·4
Queensland	18·3	23·1	28·6	26·6	13·8	16·9	20·2	18·4
South Australia	50·0	53·5	59·4	61·3	29·1	30·9	32·3	33·4
Western Australia	29·5	29·3	31·2	26·9	19·8	19·6	21·1	21·2
Tasmania	26·0	31·6	33·2	25·5	15·8	19·4	20·1	14·2
Commonwealth	34·6	37·0	42·1	45·2	22·0	23·4	26·1	27·7
New Zealand	...	...	27·3	45·0	.....	.....	16·7	27·0
Australasia	*34·6	*37·0	41·6	45·2	*22·0	*23·4	25·8	27·6

* Exclusive of New Zealand.

Importation of Capital.

Australasia ranks among the debtor nations. At the close of 1899 its people owed to persons outside its boundaries, or, more correctly speaking, there was invested in it by non-residents, and owing by its various Governments, a sum approximating to £370,075,000, or £82 per inhabitant. Of this large sum, £143,002,000 represents the private investments, and £227,073,000 the outstanding liabilities of the States and local governing bodies. More important in some respects than the corpus of the debt are the annual payments made in respect thereof. These can be stated with some exactitude. The yearly interest paid on account of State debts to other than Australasian creditors amounts to £8,015,000, and on account of local government debts, £665,000, while the income from private investments may be stated at £5,433,000, and the absentee incomes and return on shares held in London, £400,000. These various sums make up a total of £14,513,000, which is the tribute paid yearly by Australasia to London.

It has been stated above that the gross amount of investments by non-residents is £370,075,000. This sum may be divided into what was received prior to 1871, and what was received subsequent to that date, for 1871 may be conveniently taken as the opening year of latter-day Australasian finance. At the opening of 1871 these colonies stood indebted to Great Britain thus :—

	Commonwealth States.	New Zealand.	Total.
	£	£	£
On account of State and Municipalities	26,520,000	7,842,000	34,362,000
Private investments	33,090,000	5,504,000	38,594,000
Total	59,610,000	13,346,000	72,956,000

From 1871 to 1899 the increase of indebtedness was :—

	Commonwealth States.	New Zealand.	Total.
	£	£	£
On account of State and Municipalities	152,911,000	39,800,000	192,711,000
Private investments	92,296,000	12,112,000	104,408,000
Total	245,207,000	51,912,000	297,119,000

The figures just given are irrespective of the money brought by persons taking up their abode in Australasia; the amount of such money is very considerable, as will presently appear.

The interests of the various colonies are so intertwined that there is not a little difficulty in accurately determining the amount of capital imported on private account, in which each colony stands indebted to Great Britain. In former editions of this work such a distribution was made, but the changes that have taken place since 1893, in which year the bank crisis occurred, have been so many and so extensive, that a separation of the respective interests of the various States is well nigh impossible.

In considering the question of the annual payment made by Australasia to Great Britain—which is its sole creditor—it is important to have distinctly in view the fact that part of this income is payable irrespective of production, and part only arises when there has been antecedent production. In the first of these categories is the charge on State and municipal borrowings to the amount already stated (£8,680,000), and from two-fifths to a half of the income from private investments, or, in round figures, £2,139,000—the two taken together making a sum of £10,819,000, or £2 8s. 7d. per inhabitant, which must be exported entirely irrespective of the condition of productive industry. It may here be remarked that there is another source of drainage from these colonies to be considered in estimating the tributary stream flowing from Australasia to England—that is, the income of absentee colonists, which for 1899 probably reached £400,000, a figure very greatly below that of previous years. The total payments to outside creditors or investors during 1899 may be summarised as follow :—

	£
Payments on account of State or municipal borrowings, and on account of private investments on which interest must be paid irrespective of the condition of production	10,819,000
Return dependent on antecedent production	3,294,000
Absentee incomes	400,000
Total	14,513,000

Of the sum just given, £11,878,000 is paid by the States of the Commonwealth, and £2,635,000 by New Zealand.

From these figures it will be gathered that for the colonies to pay their way there ought to be an excess of exports over imports equal to the interest on loans outstanding and the earnings of investments —that is to say, if no capital were introduced and none withdrawn. But equilibrium in this respect is not to be looked for. Even now there is a stream of capital coming to the colonies in excess of what is withdrawn ; and in the worst years several thousand persons arrive in Australasia with the intention of settling, a large proportion of whom bring with them some little capital with which to begin their career in their new home. In the foregoing pages the expression "capital introduced" must be taken in a qualified sense. Under the condition of equilibrium between the introduction and withdrawal of capital, as

already demonstrated, Australasia would show an excess of exports representing the interest on State and other public loans and the tribute due to private investors. This export for 1899 was about £14,513,000, and it is therefore plain that Australasia might increase its indebtedness to the extent of over fifteen millions in any one year and at the same time show an equality between its imports and exports. With this explanation in mind it will not be difficult to understand how, in spite of the fact that during the last twenty-nine years the indebtedness of Australasia was increased by £297,119,000, the money or money's worth actually received, as represented by the excess of imports, was only £8,669,000. Such is the operation of interest as affecting a debtor country. In further explanation of this view of the matter the following figures are given; they refer to the borrowings of the Governments and local bodies during the twenty-nine years 1871–99:—

State.	Borrowings of State and Local Government Bodies.	Interest on State and Local Government Loans.	Net Amount of Money introduced.
	£	£	£
New South Wales	49,685,000	37,322,000	12,363,000
Victoria	41,617,000	39,634,000	1,983,000
Queensland	27,040,000	21,533,000	5,507,000
South Australia	21,082,000	16,551,000	4,531,000
Western Australia	6,739,000	1,970,000	4,769,000
Tasmania	6,748,000	5,177,000	1,571,000
New Zealand	39,800,000	42,488,000	(—) 2,688,000
Australasia	192,711,000	164,675,000	28,036,000

It will be seen that out of loans aggregating £192,711,000 a sum of only £28,036,000 reached Australasia, the balance of £164,675,000 being retained in London to meet interest charges, as a set-off against a similar sum which otherwise it would have been necessary to remit from Australasia. The figures in regard to private borrowings are still more striking:—

	£
Private borrowings in excess of withdrawals	104,408,000
Capital introduced by persons taking up their abode in the colonies	25,369,000
Total inflow of capital	£129,777,000
Earnings of investments of non-residents and incomes of absentees in excess of income derived by residents in the colonies from investments abroad	149,144,000
Excess of outflow over inflow	£19,367,000

It will be seen that, leaving out of consideration the capital introduced by immigrants, the return to investors, together with absentee incomes has exceeded by nearly forty millions the amount invested in Australasia, although of the principal sum, £194,408,000, still remains due. It may be difficult to conceive how such a result has been possible, but the difficulty will be lessened when it is remembered that at the beginning of the period embraced in the tables the Australasian colonies were already paying an annual tribute to private investors of £3,517,000, and, therefore, on account of debts incurred and investments made prior to 1871 something like 95 millions might have been paid away during the last twenty-nine years without any reduction in the principal owing.

The movement of capital towards Australasia up to the end of 1870 presented no features of unusual importance, for the total sum received, though large, representing as it did rather more than £38 per inhabitant, was not larger than might reasonably have been expected to be introduced into a country so rapidly adding to its population and so fertile in resources. During this period the investments on private account and by the various Governments were almost equal in amount, but in the twenty-five years that followed, the borrowing operations of the Governments far outstripped private investments. The following table shows the borrowings of the State and on private account up to the end of 1870, and in five-year periods subsequent to that date :—

Period.	Money raised by Government or Local Bodies.	Private Investments, excluding Immigrants' Capital.	Total.
	£	£	£
Prior to 1871	34,362,000	38,594,000	72,956,000
1871–75	20,999,000	*2,392,000	18,607,000
1876–80	32,804,000	11,407,000	44,211,000
1881–85	46,944,000	37,186,000	84,130,000
1886–90	53,374,000	49,077,000	102,451,000
1891–95	28,653,000	*1,322,000	27,331,000
1896–99	9,937,000	10,452,000	20,389,000
Total	227,073,000	143,002,000	370,075,000

* Excess of withdrawals over investments.

In the foregoing table the importation of capital by immigrants has been neglected ; if this be taken into consideration, the figures

given in the next table show the full amount for the period subsequent to 1870 :—

Period.	Total Capital Introduced.
	£
1871–75	23,010,000
1876–80	48,959,000
1881–85	90,504,000
1886–90	107,088,000
1891–95	30,705,000
1896–99	22,222,000
Total	£322,488,000

The total indebtedness of Australasia to British investors has been set down in the foregoing pages as £370,075,000, and the annual return therefrom, excluding absentee incomes, £14,113,000. The capital sum represents a weight of £83 2s. 10d. per inhabitant, and the annual return £3 3s. 5d. The apparent interest earned is, therefore, only a little short of 4 per cent., a rate which must be considered very favourable, seeing that £227,073,000, or three-fifths of the total, comprise Government and Municipal securities. The indebtedness of the States of the Commonwealth to British creditors amounts to £304,817,000, or £82 8s. per inhabitant, of which £179,431,000 is due by the central and local governing bodies, and £125,386,000 represents private investments. The indebtedness of New Zealand is £65,258,000, or £87 per inhabitant, of which £47,642,000 is owing by the central and local governing bodies, and £17,616,000 represents private investments.

From the table given above showing the total amount of money including that brought to the country by immigrants introduced during each quinquennial period since 1870, it will be seen that the net introduction of capital during the first period was £23,010,000, and of this New Zealand received £10,707,000, or nearly one-half, principally the proceeds of Governmental borrowings, the withdrawals of private capital being nearly as large as the amount introduced. Queensland and New South Wales had, during the period, an accession of capital to the extent of £4,329,000 and £4,321,000 respectively; in the one case the sum obtained by the State was £2,389,000, and by the public, £1,940,000, while in the other case the sum introduced by the State was £2,861,000, and by private persons something less than £1,500,000. The net sum introduced into Victoria was £2,982,000, the State having imported £3,352,000, while the export of private capital was some £370,000. Tasmania received in all £1,210,000, of which £220,000 was introduced by the State, and nearly one million by private persons, which must be reckoned a very considerable sum in view of the smallness of the population of the island. Nearly the whole sum introduced into Western Australia (£400,000) was by the

Government. South Australia, even so far back as 1871–75, was in a very different position to the other colonies in regard to private investments. During the five years the State introduced £1,722,000, but £2,661,000 was withdrawn by lenders or sent out of the colony for investment. Speaking generally, the period 1871 to 1875 was marked by large public borrowing, with a very moderate influx of private capital. During the period the importation by the various Governments amounted to £2 per inhabitant yearly, the private investments being not more than 4s. per inhabitant.

The period from 1876 to 1880 showed a net importation of capital to the amount of £48,959,000, or more than twice the sum received during the preceding five years. Of the sum named, New Zealand received £15,396,000, or slightly less than one-third, although its population was only one-eighth of the whole of Australasia. The larger portion of the money brought to New Zealand was in the shape of Government loans, which amounted to £10,884,000, the net sum received on account of private investment being £4,512,000. New South Wales stood next as regards the amount of capital received, but the borrowing by the State and local bodies only amounted to £5,458,000, or half the sum raised by New Zealand, while the private investments amounted to about £8,170,000, of which nearly two millions were received with immigrants taking up their permanent abode in the colony. The total capital imported into New South Wales during the five years was £13,626,000. Queensland received £8,028,000 during the period—an enormous sum, considering that the population was not more than 150,000. The money imported by the Government of that colony was £4,980,000, and that invested by private persons, £3,048,000. The Victorian Government imported £5,229,000, while the sum sent to the colony by private investors, over and above the amount withdrawn, was £1,949,000. The South Australian Government borrowed largely during the five years, the sum raised being £5,217,000, but, as in the previous period, the sum withdrawn by investors or sent to other colonies for investment exceeded the capital introduced by £1,644,000. Both Tasmania and Western Australia received less capital from abroad from 1876 to 1880 than in the previous five years, the amounts being £954,000 and £204,000 respectively. The Government borrowings were £671,000 in the one case and £365,000 in the other; but in Tasmania there was an investment of £283,000 by private persons, and a withdrawal of £161,000 in the case of Western Australia. Taking Australasia as a whole, the public borrowings during 1876–80 were large, amounting to £32,804,000, or a yearly sum of about £2 12s. per inhabitant. The import of private money continued on a more extended scale, the sum received in excess of withdrawals being £16,155,000, but nearly five millions of this sum were brought in by immigrants.

The facility with which New Zealand had been able to raise money on loan during the five years 1876–80 was an object lesson not lost on the other colonies, for during the five years from 1881 to 1885 the sum

of £46,944,000 was raised by the various Governments and local bodies; while private investors, banks, and financial institutions poured in money at an almost equal rate, the net sum received on private account being, in round figures, £43,560,000. These sums represent yearly amounts of £3 2s. 4d. and £2 18s. 1d., or together over £6 per inhabitant—a rate of increase in indebtedness quite unparalleled in any country except in the next succeeding five years of Australasian history. Of the large sum of £90,504,000 received by these colonies, the share of New South Wales was £30,473,000. In the light of this statement it is easy to understand how, during this same period, though one of drought and restricted production, the industrial life of the colony was marked by increasing wages, shorter hours, and full employment. The importation by the State amounted to £16,066,000, and by private investors to £14,407,000, but of the sum last quoted £2,719,000 represented the money brought by immigrants and entailed no burthen on the colony for future interest to be exported. This period was, so far as New South Wales is concerned, the one marked by the most lavish borrowing by the State, though it yields to the subsequent quinquennium in regard to the importation of private capital. Queensland was the colony next to New South Wales in receipt of most money during the period under review, the Government of that colony having obtained £7,094,000, while private investments amounted to £12,506,000—enormous sums for a population of a quarter of a million. Included in the private investments, however, is the sum of £1,927,000 introduced by immigrants taking up their abode permanently in the colony. The imports of capital into New Zealand during the quinquennium were still very heavy, amounting to £7,442,000 by the State, and £10,475,000 on private account, or £17,917,000 in all. Of the private importation, £587,000 accompanied the owners who settled in the colony. The capital received by Victoria, which in the two preceding periods amounted to very moderate sums, now rose to £13,002,000, viz., £8,519,000 on account of the Government, and £4,483,000 by private investors. The South Australian Government in 1881–85 was still a large borrower, £5,895,000 being raised and expended during that time, while, contrary to the experiences of previous periods, there was an importation on private account of £1,000,000. Tasmania, also, considerably increased its borrowings, the State raising £1,465,000 in the five years, while £425,000 was sent to the colony for investment or was received with the owners. The borrowing of the Western Australian Government for 1881–85 amounted to £463,000, but not more than £265,000 was received for private investment, or in all £728,000.

The next period, 1886–90, was marked by very extraordinary features. The average population of the seven colonies was 3,540,000, yet during the short space of five years the various States governing these people raised and expended £53,374,000, while an additional sum of £53,714,000 was received for investment on private account, or was introduced into

the country by persons who made it their abode. But even more astonishment will be evinced on considering the detailed figures for each colony. Of the large total received by the seven colonies, considerably more than one-half—£54,690,000—was obtained by Victoria, and, as the population of this colony during the five years under review was 1,070,000, the inflow of capital amounted to over £51 per inhabitant. The State and local bodies borrowed and disbursed £16,987,000, which was the largest expenditure from the proceeds of loans that any colony contrived to crowd into the short space of five years. The private capital introduced was £35,792,000, and the sum brought by persons taking up their abode in the country was £1,911,000. These figures afford a sufficient clue to the astounding impetus which trade received during these years, and the corresponding rise in land values. New South Wales, though not the recipient of so much money as its southern neighbour, nevertheless contrived to obtain £28,145,000—a far larger sum than could be conveniently absorbed in five years, especially as in the like preceding period £30,000,000 was absorbed. The capital introduced represented £11,571,000 of Government borrowings, £15,187,000 of private investments, and £1,387,000 brought by persons making New South Wales their home. The Queensland Government was also a large borrower, its loan expenditure during the five years, 1886–90, being not less than £9,581,000. The private capital introduced, however, fell off largely. The sum received, allowing for withdrawals to the amount of £3,360,000, was £1,574,000. The flow of private money to New Zealand practically ceased during the period now under consideration, amounting only to £632,000, as compared with £10,475,000 in the preceding five years; but Government borrowings still continued, and a sum of £6,560,000 was raised and expended. South Australia occupied an exceptional position, for though the Government introduced some £5,693,000, there was a large withdrawal of private capital, or, as it may be, an export of capital for investment in other colonies, so that the net import on public and private account amounted to £1,345,000. Tasmania, with its population of 150,000, was well in the struggle for British investments, the State importation being £2,557,000, and the investment by private persons, £570,000; of this last sum £85,000 was introduced by persons taking up their abode in the colony. It was about this period, too, that Western Australia began to attract attention as a field for investment, for over and above the sum of £425,000 introduced by the Government, about £1,009,000 was invested by private persons, perhaps one-fifth of the amount being accompanied by the investors themselves.

The recitation of borrowing just given brings the financial history of the Australias down to the close of 1890. Two years more of credit and investment remain to be traced, after which came the collapse of credit, and the events of May, 1893, still fresh in the public memory. That two years elapsed after the close of 1890 before Australasian public credit in London finally collapsed is true only of Victoria, and

in a modified sense of New South Wales, Western Australia, and Tasmania. These colonies continued to be the recipients of British money, but private investments were—excepting in the case of Victoria—on a minor scale. Victoria received fresh capital to the extent of £8,834,000, of which amount only £464,000 was brought in by immigrants. New South Wales received from private investments over £3,000,000, but the withdrawals were also extensive, so that the net amount of capital invested was only £1,711,000. Western Australia received £952,000, of which £408,000 was accompanied by the owners. Tasmania received £792,000, and of this about £271,000 was introduced by permanent residents. Withdrawals of private capital were already in progress before the close of 1890, and were continued from South Australia, but to a less extent than in the preceding period. New Zealand ceased to receive any private money, while Queensland, for the first time in its history, showed a net withdrawal of capital, the amount of which during the two years was £2,011,000, but as the State had introduced £1,917,000, there was an actual withdrawal of £3,928,000. During the two years 1891 and 1892 the total capital imported into the seven colonies was £25,083,000, and of this £18,786,000 was introduced by the various Governments and local bodies.

During the three years which followed there was a withdrawal of private capital from Australasia to the extent of £7,619,000, so that in spite of the importation during the years 1891 and 1892, the quinquennium showed a net withdrawal of £1,322,000. There was during the period a movement of £20,088,000 apparently introduced, and £21,410,000 withdrawn; but this movement was mainly between the colonies themselves, and not between Australasia and Great Britain. Looking at the figures in detail, it would seem that there was an importation in excess of withdrawals of £14,686,000 into Victoria, and £2,382,000 into Western Australia. So far as Victoria is concerned, this introduction of money was not by way of investment; it was merely the recall by the large financial institutions of their capital from other colonies. This withdrawal affected New South Wales and Queensland most largely; £10,162,000 was withdrawn from the latter province during the five years, and it is a great tribute to the resources and stability of that great colony that this withdrawal should have been effected with so little disturbance to its financial position. New South Wales lost £4,481,000, part of which represents deposits gathered in London and withdrawn during the panic, and part transference of capital by branch institutions to the head office in Melbourne. From New Zealand £2,143,000 was withdrawn, and from South Australia £1,698,000. The withdrawal in nearly all cases has been a silent one; and it is only when a financial institution absolutely fails and the courts are invoked to consent to the removal of assets that the community at large realises the process that has been going on.

Taking the whole period of five years, there was a total of £30,705,000 introduced. Of this sum, £28,653,000 represents the borrowings of the various Governments and local bodies, the share of each being as follows :—

New South Wales	£11,655,000
Victoria	5,430,000
Queensland	2,996,000
South Australia	638,000
Western Australia	2,291,000
Tasmania	1,835,000
New Zealand	3,808,000
Australasia	£28,653,000

Even in this period immigration did not entirely cease, and it is estimated that an amount of £3,374,000 was introduced by persons who took up their permanent abode in the country.

The withdrawal of capital from Australia practically ceased in 1895, and in the two following years there was a considerable sum introduced chiefly to Western Australia, where the goldfields claimed much attention from English mining speculators. During the four years ending with 1899, State and municipal borrowings amounted to £9,937,000, and £12,285,000 was introduced on private account, including £1,833,000 brought to the country by the owners. The total introduction of capital, therefore, amounted to £22,220,000.

In speaking of the British capital invested in Australasia no mention has been made of the amount lost by the owners in unprofitable speculations, of which there have been not a few. From the nature of the case the sum total of these losses cannot be stated with any degree of accuracy ; but there is no reason to suppose that the proportion is greater than would have occurred in like investments if made in the British Isles.

INCOME.

The incomes received by the people of Australasia can be determined with considerable accuracy, as the information available for such an estimate is fairly extensive. For New South Wales, Victoria, South Australia, and New Zealand there are income-tax figures, in Queensland and Tasmania particulars of collections under dividend and income-tax acts, and for several colonies very full returns relating to land-values. Besides these direct sources of information there are official estimates of incomes for New South Wales and New Zealand. Excluding the revenues of the various State Governments, the yearly income derived from Australasia amounts to £201,497,000, and of this sum local residents draw £186,984,000, and British investors and absentees £14,513,000,

and of this last-mentioned sum £8,680,000 represents income derived from Government or municipal stocks, and £5,833,000 the amount from private sources. Of the total income (£201,497,000) the States of the Commonwealth claim £168,760,000, and New Zealand £32,737,000, the earnings of non-residents in each case being £11,878,000 and £2,635,000. Compared with the total derived from these States, absentees draw 7 per cent. of the Commonwealth incomes and 8 per cent. of those of New Zealand.

Leaving out of consideration the income drawn by debenture-holders in England, as these are not in any colony subject to taxation, it would appear that the income derived from private sources for each of the principal States was in 1899 :—

State.	Total.	Per Inhabitant.
	£	£
New South Wales	63,490,000	47·2
Victoria	49,828,000	42·9
South Australia	12,638,000	34·3
Queensland, Western Australia, and Tasmania	36,055,000	43·6
Commonwealth	162,011,000	43·8
New Zealand	30,806,000	41·1
Australasia	192,817,000	43·3

The most noteworthy point about the figures just given is the difference between the gross incomes of New South Wales and Victoria, viz., £13,662,000 ; this difference chiefly arises in the incomes in excess of £200 a year. According to the latest published incomes tax returns of Victoria, the gross total of all incomes in excess of £200 is £10,080,000, whereas in New South Wales, the taxable incomes over £200 a year amount to £11,500,000. In Victoria, however, all incomes are taxable, but in New South Wales the incomes derived from the use or occupancy of land—that is to say, incomes amounting to nearly £7,000,000—escape taxation altogether. That a larger total income is derived from New South Wales than from Victoria must be evident to all who have studied the economic position of the two States, but it is impossible to believe that there is such a difference as the income tax figures disclose. As it is impossible to reject the Victorian income tax figures, they have been used in the estimates given in this chapter, but the writer very strongly suspects that a large number of taxable incomes escape taxation in the southern State. It is absurd to suppose that incomes over £200 a year aggregate in Victoria only a little more than ten millions as compared with eighteen millions in New South Wales.

Dividing the incomes into two categories, viz., those below and those above £200 a year, very interesting results are obtained; the figures do not include the sum of £8,680,000 paid to debenture-holders :—

State.	Number of persons with incomes of £200 and over.	Total Incomes £200 and over.	Total Incomes under £200.	Total of all Incomes.
	No.	£	£	£
New South Wales	31,220	17,894,000	45,596,000	63,490,000
Victoria	19,060	10,080,000	39,748,000	49,828,000
South Australia	6,600	3,438,000	9,200,000	12,638,000
Queensland, Western Australia, and Tasmania	16,630	9,208,000	26,847,000	36,055,000
Commonwealth	73,510	40,620,000	121,391,000	162,011,000
New Zealand	15,400	8,624,000	22,182,000	30,806,000
Australasia	88,910	49,244,000	143,573,000	192,817,000

The amount of income derived from private sources (that is to say, all incomes except payments made by the various governments and local bodies to their debenture-holders), is thus £192,817,000, and of this amount £5,833,000, or slightly over 3 per cent., is drawn by non-residents, in addition to the sum of £8,680,000 paid to debenture-holders. The incomes from investments drawn from New South Wales amount to £2,530,000, or 4 per cent. of the total incomes; from Victoria, £1,228,000, or 2½ per cent.; £704,000, or 2¼ per cent., from New Zealand; and £1,371,000, or 2¾ per cent., from the other States.

Old Age Pensions.

The question of granting pensions to aged persons unable to earn their livelihood has been of late years much discussed in New South Wales, Victoria, and some of the other states, while in New Zealand an old age pension system has been in operation for two years. In New Zealand, every person of the full age of sixty-five years, or upwards, is entitled to a pension, provided he has resided continuously in the colony for twenty-five years, certain concessions in regard to residence being made in favour of seamen and others. To be entitled to a pension, a person must not possess an income in excess of £52 a year, nor property exceeding £270 in value. There are also other qualifications, principally affecting good citizenship. The full pension is £18 a year, payable in monthly instalments. For each £1 of income above £34 a year, and for each £15 of property above £50, £1 per annum is deducted from the amount of the pension. In March,

1900, there were 22,509 persons in New Zealand whose ages exceeded sixty-five years, and of these 11,285 had already been granted pensions, 9,656 in the full amount, and 1,629 in sums ranging from £1 to £17. The average pension paid was £17 3s. 4d., and the sum payable in respect of all pensions, excluding management, is £193,718. The proportion of the population who claim old age pensions varies according to the locality. This variation is due partly to the differences in the proportion of the persons above the pension age, and partly to the fact that in districts where mining is the chief industry, few persons are able to earn their living after they reach sixty-five years. The proportion of pensioners to the population over sixty-five years of age is a little in excess of 50 per cent., and the proportion of pensioners to those qualified, both by age and residence, is about 58 per cent.; but there can be hardly any doubt that both the number of pensioners and the proportion to total population will increase considerably during the next few years.

The old age pension scheme sanctioned by the Parliament of New South Wales specifies a pension of £26 a year, diminished by £1 for every £1 of income above £26 a year, and by £1 for every £15 of property that the pensioner possesses. Where a husband and wife are each entitled to a pension, the amount is fixed at £19 10s. a year each, unless they are living apart under a decree of the Court or a deed of separation, when the full sum of £26 will be allowed. A calculation, made by the Actuary of Friendly Societies, shows the following comparisons between New South Wales and New Zealand. The figures refer to June, 1900, for the latter, and to the year 1901 for New South Wales :—

Classification.	New Zealand.	New South Wales.
Persons 65 years and upwards	22,509	38,933
Number with 25 years' residence	19,418	35,399
Number with age and residential qualification with financial qualification also	11,285	22,692

According to this showing, 58·3 per cent. of the persons 65 years and upwards would be entitled to a pension under the proposals of the New South Wales Government. Amongst the 22,692 persons referred to above, there would be approximately 4,612 married persons living together. From these facts, and making a due deduction from the pension for income or property possessed by the pensioners, the average pensions payable would be £23 4s. per head, and the total pensions list £526,700. The conditions of the colony are such that in five years' time the number of persons sixty-five years and upwards with twenty-five years' residence therein will be very little short of

47,000, and the number for whom pension provision must be made in 1906 will be 30,100, and the total pensions payable £698,785.

In some of the other colonies the proportion of aged persons is much larger than in New South Wales, as the following figures, based upon a calculation of the number of survivors of the persons aged fifty-five years at the census of 1891, plainly show :—

State.	Males.	Females.	Total.
Victoria	35,027	25,623	60,650
New South Wales	22,785	16,148	38,933
Queensland	7,081	4,316	11,397
South Australia	6,655	6,582	13,237
Western Australia	1,603	631	2,234
Tasmania	3,707	3,043	6,750
Commonwealth	76,858	56,343	133,201

If the New South Wales proportion of persons eligible for pensions holds good, and there is every reason to suppose it does, then the number of persons who could claim pensions in the year 1901 would be 77,630, and the total pension roll £1,800,000. If, however, the more limited pension scheme of New Zealand be adopted by the Commonwealth, then the number of pensioners would be somewhat reduced, and the total pensions payable would stand at £1,175,000.

Banking.

The laws relating to banks and banking at present in force are susceptible of great improvement, and in 1893 the failure of many monetary institutions which posed as banks directed attention to the urgent necessity for entirely revising the conditions under which deposits might be taken from the general public, but so far no new legislation has been enacted. All institutions transacting the business of banking are required by law to furnish, in a specified form, quarterly statements of their assets and liabilities, and from these statements and the periodic balance-sheets the tables in this chapter have been compiled. The returns furnished by the banks, though in compliance with the laws of the colonies, are by no means satisfactory, being quite unsuited to the modern methods of transacting banking business, and they cannot be accepted without question as indicating the stability or instability of the institutions by which they are issued. As a rule, nothing can be elicited beyond what is shown in the half-yearly or yearly balance-sheets. No uniformity is observed as regards the dates of closing the accounts, and the modes of presentation are equally diverse. Important

items which should be specifically stated are included with others of minor import, and, as a rule, current accounts are blended with other accounts instead of being separately shown. The value of the information vouchsafed to the public is illustrated by the fact that it was impossible to obtain from the publications of several institutions suspending payment in 1893 the amount of their liabilities either to the public or the State, and these particulars were never disclosed.

Capital Resources of Banks.

According to the latest information published, the paid-up capital of the twenty-two banks operating in Australasia is £21,190,838, of which £5,815,584, inclusive of £2,000,000 guaranteed to the Bank of New Zealand by the Government of that colony, has a preferential claim on the profits of the companies. Below will be found a statement of the ordinary and preferential capital of each bank at the date shown, with the amount of the reserve fund of the institution. In the case of several companies which were reconstructed, there are reserves which are held in suspense pending realisation of assets, and of these no account has been taken in the table :—

Bank.	Date of Balance-sheet.	Capital paid up.			Reserve Fund.
		Ordinary.	Preferential.	Total.	
		£	£	£	£
Australian Joint Stock Bank (Ld.)	30 June, 1900	1,168,042	....	1,168,042	52,000
Bank of Adelaide	26 Mar., 1900	400,000	....	400,000	165,000
Bank of Australasia	16 Oct., 1899	1,600,000	....	1,600,000	800,000
Bank of New South Wales	31 Mar., 1900	2,000,000	....	2,000,000	1,246,405
Bank of New Zealand	31 Mar., 1900	419,519	2,500,000	2,919,519	23,474
Bank of North Queensland (Ld.)	30 June, 1900	100,000	....	100,000	6,000
Bank of Victoria (Ld.)	30 June, 1900	1,060,717	416,760	1,477,477	100,000
City Bank of Sydney	30 June, 1900	400,000	....	400,000	100,244
Colonial Bank of Australasia (Ld.)	31 Mar., 1900	98,392	304,044	402,436	10,000
Commercial Bank of Australia (Ld.)	30 June, 1900	1,085,253	2,117,070	3,202,323	....
Commercial Banking Co. of Sydney (Ld.)	30 June, 1900	1,000,000	....	1,000,000	1,010,000
Commercial Bank of Tasmania (Ld.)	31 Aug., 1900	141,493	....	141,493	100,000
English, Scottish, and Australian Bank (Ld.)	30 June, 1899	539,437	....	539,437	45,679
London Bank of Australia (Ld.)	31 Dec., 1899	742,985	171,930	914,915	....
National Bank of Australasia (Ld.)	31 Mar., 1900	1,669,416	305,780	1,975,196	54,978
National Bank of New Zealand (Ld.)	31 Mar., 1900	250,000	....	250,000	60,000
National Bank of Tasmania (Ld.)	31 May, 1900	152,040	....	152,040	22,500
Queensland National Bank (Ld.)	30 June, 1900	412,773	....	412,773	12,000
Royal Bank of Australia (Ld.)	29 Sept., 1900	150,000	....	150,000	10,000
Royal Bank of Queensland (Ld.)	30 June, 1900	385,187	....	385,187	46,000
Union Bank of Australia (Ld.)	28 Feb., 1900	1,500,000	....	1,500,000	1,000,000
Western Australian Bank	30 June, 1900	100,000	....	100,000	200,000

The preceding table shows the position of the capital account at date of balancing ; but a number of the banks had made calls on their shareholders which will increase their paid-up capital. The amount of these

calls and the total working capital that will be available when they are met are appended :—

Bank.	Capital paid and being called up.		
	Paid up.	Being called.	Total Working Capital.
	£	£	£
Australian Joint Stock Bank (Limited)	1,168,042	6,473	1,174,515
Bank of Adelaide	400,000	.....	400,000
Bank of Australasia	1,600,000	.....	1,600,000
Bank of New South Wales	2,000,000	.....	2,000,000
Bank of New Zealand	2,919,519	80,481	3,000,000
Bank of North Queensland (Limited)	100,000	.....	100,000
Bank of Victoria (Limited)	1,477,477	533	1,478,010
City Bank of Sydney	400,000	.....	400,000
Colonial Bank of Australasia (Limited)	402,436	36,844	439,280
Commercial Bank of Australia (Limited)	3,202,323	586,851	3,789,174
Commercial Banking Company of Sydney (Limited)	1,000,000	.....	1,000,000
Commercial Bank of Tasmania (Limited)	141,493	.....	141,493
English, Scottish, and Australian Bank (Limited)	539,437	.....	539,437
London Bank of Australia (Limited)	914,915	1,750	916,665
National Bank of Australasia (Limited)	1,975,196	.....	1,975,196
National Bank of New Zealand (Limited)	250,000	.....	250,000
National Bank of Tasmania (Limited)	152,040	.....	152,040
Queensland National Bank (Limited)	412,773	2,475	415,248
Royal Bank of Australia (Limited)	150,000	.....	150,000
Royal Bank of Queensland (Limited)	385,187	1,463	386,650
Union Bank of Australia (Limited)	1,500,000	.....	1,500,000
Western Australian Bank	100,000	.....	100,000

The paid-up capital of the banking companies now operating in Australasia has increased from £14,724,587 before the crisis to £21,190,838, or by £64,266,251. In 1893, however, there were in existence two banks, with a combined capital of £900,000, which are now defunct; and it should also be mentioned that capital to the amount of £5,418,000 has been written off during the last seven years.

Liabilities and Assets of Banks.

The liabilities of the banks enumerated, at the dates which have been previously given, totalled £140,237,662, against which amount assets aggregating £167,387,005 were shown. The following table gives the liabilities of each institution to the public, notes in circulation and deposits being distinguished from other liabilities. In some cases small items which should be classed with "other liabilities" are included with deposits, as they cannot be distinguished in the balance-

sheets; and in the case of the Commercial Bank of Australia, Limited, the accounts of the assets trust have been excluded :—

Bank.	Notes in Circulation.	Deposits.	Other Liabilities to Public.	Total Liabilities to Public.
	£	£	£	£
Australian Joint Stock Bank (Limited)	115,915	6,656,512	324,106	7,096,533
Bank of Adelaide	127,222	2,196,791	164,566	2,488,579
Bank of Australasia	453,103	13,646,325	3,048,410	17,147,838
Bank of New South Wales	916,176	21,272,199	2,955,370	25,143,745
Bank of New Zealand	722,770	8,587,860	884,751	10,195,381
Bank of North Queensland (Limited)	.....	230,549	94,365	324,914
Bank of Victoria (Limited)	134,291	4,646,794	557,101	5,338,186
City Bank of Sydney	69,929	1,026,727	559	1,097,215
Colonial Bank of Australasia (Limited)	116,716	2,514,774	111,574	2,743,064
Commercial Bank of Australia (Limited)	157,504	3,596,172	252,356	4,006,032
Commercial Banking Company of Sydney (Ld.)	427,859	11,134,777	1,020,127	12,582,763
Commercial Bank of Tasmania (Limited)	49,804	1,456,703	.....	1,506,507
English, Scottish, and Australian Bank (Ld.)	30,778	4,832,414	324,039	5,187,231
London Bank of Australia (Limited)	155,532	4,636,835	888,263	5,680,630
National Bank of Australasia (Limited)	329,222	6,185,617	779,352	7,294,191
National Bank of New Zealand (Limited)	211,605	2,510,755	478,820	3,201,180
National Bank of Tasmania (Limited)	57,127	447,827	12,652	517,606
Queensland National Bank (Limited)	.....	6,295,650	601,762	6,897,412
Royal Bank of Australia (Limited)	6,077	428,779	166,688	601,544
Royal Bank of Queensland (Limited)	.....	888,808	26,923	915,731
Union Bank of Australia (Limited)	489,083	15,793,602	2,307,641	18,590,326
Western Australian Bank	128,178	1,514,914	37,962	1,681,054

The assets of each bank are shown below :—

Bank.	Coin and Bullion.	Advances.	Other Assets.	Total Assets.
	£	£	£	£
Australian Joint Stock Bank (Limited)	657,305	6,825,099	846,235	8,328,639
Bank of Adelaide	388,750	1,401,690	1,303,540	3,093,980
Bank of Australasia	3,034,335	13,415,416	3,208,240	19,657,991
Bank of New South Wales	6,481,445	18,518,757	3,509,824	28,510,026
Bank of New Zealand	1,407,526	5,753,026	6,027,822	13,188,374
Bank of North Queensland (Limited)	53,152	298,826	82,403	434,381
Bank of Victoria (Limited)	896,178	4,814,349	1,258,426	6,968,953
City Bank of Sydney	319,342	1,131,648	163,821	1,614,811
Colonial Bank of Australasia (Limited)	532,174	2,080,439	553,337	3,165,950
Commercial Bank of Australia (Limited)	1,057,879	4,113,231	2,079,353	7,250,463
Commercial Banking Company of Sydney (Ltd.)	2,529,129	9,045,095	3,088,690	14,662,914
Commercial Bank of Tasmania (Limited)	207,640	1,130,821	418,000	1,756,461
English, Scottish, and Australian Bank (Ltd.)	703,520	4,531,730	558,542	5,793,792
London Bank of Australia (Limited)	773,223	5,315,251	526,700	6,615,174
National Bank of Australasia (Limited)	1,451,793	5,542,456	2,415,986	9,410,235
National Bank of New Zealand (Limited)	649,025	2,741,453	160,711	3,551,189
National Bank of Tasmania (Limited)	137,667	530,862	32,595	701,124
Queensland National Bank (Limited)	779,943	5,284,048	1,270,194	7,334,185
Royal Bank of Australia (Limited)	53,238	417,474	299,953	770,665
Royal Bank of Queensland (Limited)	275,346	922,572	159,978	1,357,896
Union Bank of Australia (Limited)	3,338,499	15,412,707	2,461,485	21,212,691
Western Australian Bank	791,641	843,538	371,932	2,007,111

Results of Working of Banks.

The results of working of each bank for the latest period for which information is available are given below. With the exception of the Bank of Adelaide, the Bank of New Zealand, the English, Scottish, and

Australian Bank, the London Bank of Australia, and the National Bank of New Zealand, for which the figures refer to twelve months' operations, the amounts given cover a period of six months. The dates of the balance-sheets are as shown on page 740 :—

Bank.	Class of Shares.	Amount brought forward.	Net Profits less Rebate on Bills current.	Dividend paid.		Amount transferred to Reserve Fund, &c.	Amount carried forward.
				Rate per cent. per annum.	Amount.		
		£	£		£	£	£
Australian Joint Stock Bank (Ltd.)..	Ordinary ..	10,007	2,057	..	....	....	12,064
Bank of Adelaide	,, ..	*1,988	38,413	†8	†18,000	5,000	17,401
Bank of Australasia	,, ..	10,282	119,871	8	64,000	35,000	11,153
Bank of New South Wales	,, ..	20,017	99,859	9	90,000	3,595	26,281
Bank of New Zealand	Preferential / Ordinary ..	50,000	145,020	..	....	....	50,000
Bank of North Queensland (Limited)	Ordinary ..	9	3,458	2½	1,313	2,000	154
Bank of Victoria (Limited)	Preferential / Ordinary ..	24,736	28,554	5 / 2½	10,419 / 13,266	....	29,605
City Bank of Sydney	Ordinary ..	9,311	8,041	4	8,000	....	9,352
Colonial Bank of Australasia (Ltd.)..	Preferential / Ordinary ..	1,617	8,833	4 / ..	6,081 /	‡2,361	2,008
Commercial Bank of Australia (Ltd.)	Preferential / Ordinary ..	13,843	58,265	3 / ..	31,756 /	....	10,352
Commercial Banking Co. of Sydney (Limited)	Ordinary ..	19,272	50,879	10	50,000	....	20,151
Commercial Bank of Tasmania (Ltd.)	,, ..	1,634	6,827	7	5,200	1,500	1,761
English, Scottish, and Australian Bank (Limited).....	,, .	6,034	15,411	..	....	6,034	15,411
London Bank of Australia (Limited)	Preferential / Ordinary ..	4,572	15,057	5½ / ..	9,456 /	....	10,173
National Bank of Australasia (Ltd.)..	Preferential / Ordinary ..	63,718	22,152	5 / ..	7,644 /	68,000	10,226
National Bank of New Zealand (Ltd.)	Ordinary ..	5,161	*33,848	†9	†12,500	20,000	7,509
National Bank of Tasmania (Limited)	,, ..	3,450	5,528	5	3,991	....	4,987
Queensland National Bank (Limited)	,, ..	....	12,000	..	3,000	9,000	..
Royal Bank of Australia (Limited) ..	,, ..	3,258	5,863	4	3,000	....	6,121
Royal Bank of Queensland (Limited)	,, ..	2,595	8,383	2½	5,056	5,500	422
Union Bank of Australia (Limited) ..	,, ..	30,363	92,002	7	52,500	50,000	19,865
Western Australian Bank	,, ..	14,278	11,779	17½	8,750	....	17,307

* After paying interim dividend. † Including bonus of 1 per cent. per annum.
‡ Additional interest on deferred deposit receipts.

The net profit shown for the Bank of New Zealand is exclusive of the dividend paid on preference shares and interest on guaranteed stock. The amounts appropriated in reduction of the book value of assets in liquidation, in reduction of debenture conversion account, and in reduction of Colonial Bank purchase goodwill account are also excluded. The amount brought forward was paid to the Assets Realisation Board, and the amount carried forward will also be paid to the same Board. The dividend paid by the Queensland National Bank represents a repayment to the Government of that colony in terms of the scheme of arrangement, and the amount transferred to reserve fund, &c., includes £6,000 paid to private depositors' repayment fund. The net profit shown for the London Bank of Australia is exclusive of the interest

on "Transferable Fixed Deposits," which amounted to £115,640. The dividend tax payable by the two Tasmanian banks and the Royal Bank of Queensland has been included in the amount of dividend shown in the table.

Banking Business of each Colony.

Of the twenty-two banks operating in Australasia at the beginning of 1900, thirteen had offices in New South Wales, eleven in Victoria, eleven in Queensland, seven in South Australia, six in Western Australia, four in Tasmania, and five in New Zealand. There were only two banks doing business in all the seven colonies; one transacted business in six colonies; one in five colonies; two in four; two in three; four in two; and ten banks did not extend their business beyond the limits of one colony.

The liabilities and assets of the twenty-two banks of issue operating in the different colonies during the June quarter of 1900 are shown in the following tables. The total liabilities of the banks are given as £111,875,317, and the assets as £132,800,280, showing a surplus of assets of £20,924,963. If the returns gave all the facts in relation to the operations of the banks, this surplus should represent the capital or funds provided out of their own resources; but as the capital and reserve funds amount to £26,745,411, it is evident that there is a balance of about £5,820,448 to be otherwise accounted for. This sum represents part of the deposits obtained in Australasia and used in the London business of the banks; the British deposits with Australasian banks having decreased to about fourteen millions. The following figures will convey some notion of the business transacted within each colony. It should be noted that under the heading of deposits bearing interest has been included perpetual inscribed stock of the English, Scottish, and Australian Bank (Limited), to the amount of £2,084,615, namely, £700,758 in New South Wales, £942,090 in Victoria, £326,754 in South Australia, and £115,013 in Queensland:—

State.	Notes in circulation not bearing Interest.	Bills in circulation not bearing Interest.	Deposits.		Balances due to other Banks, &c.	Total Liabilities.
			Not bearing Interest.	Bearing Interest.		
	£	£	£	£	£	£
New South Wales	1,333,341	218,949	12,976,711	19,679,521	61,335	34,269,857
Victoria	939,244	97,705	12,700,585	17,939,790	140,949	31,818,273
Queensland	.....	84,691	5,048,781	8,303,680	87,786	13,524,938
South Australia	399,264	11,373	2,762,132	3,528,628	61,829	6,763,226
Western Australia	362,141	33,432	2,908,891	1,499,322	41,817	4,845,603
Tasmania	154,422	19,975	1,559,640	1,613,999	....	3,348,036
Commonwealth	3,188,412	466,125	37,956,740	52,564,940	393,716	94,569,933
New Zealand	1,331,450	48,269	7,260,307	8,606,607	58,751	17,305,384
Australasia	4,519,862	514,394	45,217,047	61,171,547	452,467	111,875,317

The preceding table shows that about 95 per cent. of the Australasian liabilities of the banks consisted of deposits, viz., £106,388,594 out of £111,875,317. The statements by banks in each colony, with the exception of Tasmania, distinguish between deposits at call and deposits bearing interest. In Tasmania, although not obliged by law to do so, a similar distinction has been made by two banks out of four, and assuming that in the case of the other two banks the proportion of deposits at call to the total deposits is the same, the total deposits at call are as stated in the table, viz., £45,217,047, or 42·5 per cent. of all deposits.

The assets for the same period are shown below. Certain assets of small amount, not classifiable under any of the sub-heads of the table, have been included in the total, and in the case of one colony technical over-statements of the assets of some of the banks have been rectified. The value of landed property in Victoria is inclusive of the interest of the Commercial Bank of Australia (Limited), in the Special Assets Trust Company (Limited). Also, under the heading of "Notes and bills of other banks," etc., are included Queensland Treasury Notes to the amount of £618,427 :—

State.	Coin.	Bullion.	Landed Property.	Notes and Bills discounted, and all other Debts due to the Banks.	Notes and Bills of other Banks, and Balances due from other Banks.	Total Assets.
	£	£	£	£	£	£
New South Wales.....	6,864,640	263,901	1,868,320	32,921,475	634,359	42,552,695
Victoria	7,961,740	386,944	2,825,643	29,679,951	520,945	41,375,223
Queensland	1,586,390	318,595	727,824	12,609,946	894,198	16,136,953
South Australia	1,662,026	11,989	474,285	4,244,161	71,954	6,464,415
Western Australia.....	2,363,211	231,674	198,564	2,739,295	272,529	5,805,273
Tasmania	620,583	....	126,082	2,383,847	231,719	3,362,231
Commonwealth	21,058,590	1,213,103	6,220,718	84,578,675	2,625,704	115,696,790
New Zealand.....	2,613,773	121,262	450,696	13,836,584	81,175	17,103,490
Australasia.....	23,672,363	1,334,365	6,671,414	98,415,259	2,706,879	132,800,280

Metallic Reserves of Banks.

The following table shows the metallic reserves held by the banks as against their total Australasian liabilities, and also against their liabilities at call, viz., deposits at call and note circulation. The table, however, cannot be taken as complete, as some banks receiving deposits in England and elsewhere do not include such liabilities in their returns :—

State.	Coin and Bullion.	Total Liabilities.	Liabilities at Call.	Proportion of Coin and Bullion—	
				To Total Liabilities.	To Liabilities at Call.
	£	£	£	per cent.	per cent.
New South Wales	7,128,541	34,269,857	14,310,052	20·80	49·81
Victoria	8,348,684	31,818,273	13,639,829	26·24	61·21
Queensland	1,904,985	13,524,938	5,048,781	14·08	37·73
South Australia	1,674,015	6,763,226	3,161,396	24·75	52·95
Western Australia	2,594,885	4,845,603	3,271,032	53·55	79·33
Tasmania	620,583	3,348,036	1,714,062	18·53	36·20
Commonwealth	22,271,693	94,569,933	41,145,152	23·55	54·13
New Zealand	2,735,035	17,305,384	8,591,757	15·80	31·83
Australasia	25,006,728	111,875,317	49,736,909	22·35	50·28

It will be seen that Queensland apparently holds the weakest position in the proportion of cash reserves to total liabilities, and New Zealand in proportion to liabilities at call. This, however, means very little, seeing that in some of the colonies many banks profess to hold gold largely in excess of their wishes or requirements.

Expenses of Banking.

The balance-sheets of banks, as presented to the shareholders, do not usually contain details likely to satisfy the inquirer curious to discover the amount of gross profits as compared with the net amount divisible amongst shareholders. Allowing the same proportion of expenses for the banks not disclosing this information as for those concerning which particulars are available, the following results are obtained for the lasf working year dealt with in the preceding pages :—

Total trading assets	£159,175,000
Capital and reserves	26,745,700
Gross earnings, less reserve for bad and doubtful debts	5,834,300
Gross expenditure, including interest	4,612,300
Net earnings	1,222,000

Compared with the total assets, the net earnings represent 0·73 per cent.; and compared with the banks' own resources, *i.e.*, capital and reserved profits, 4·57 per cent. The gross expenditure above set down may be divided into expenses of management, £1,981,300, and interest, £2,631,000; these together amount to 79·1 per cent. of the gross earnings, the management expenses being 34·0 per cent., and the interest 45·1 per cent. It would appear, therefore, that for every £1 of net earnings, the sum of £1 12s. 5d. is spent in management expenses, and £2 3s. 1d. in interest. The cost of working banking institutions in Australia is undoubtedly very large; but this class of business is everywhere expensive, and an analysis of the balance-sheets of some thirty British banks shows that the expenses of management amount to nearly 14s. 3d. for every £1 of net earnings.

Compared with their resources, the net earnings of Australasian banks are far less than those of English banks, as will appear from the following statement, which gives the rate per cent. per annum of earnings compared with total resources, including, of course, deposits and issue, as well as shareholders' capital and reserves :—

	£ s. d.
Bank of England	1 11 1
English Provincial Banks	1 7 8
Irish Banks	1 10 2
London Banks	1 7 9
Banks of Isle of Man and Channel Islands	1 4 3
Scotch Banks	1 3 1
Banks trading in Australasia	0 16 1

The expense of banking in Australasia is largely due to the number of branches open throughout the country; thus in Australasia there are 1,499 banks and branches, or one to every 3,000 persons, while in England the proportion is one bank to 8,500 persons (exclusive of private banks), in Scotland one to every 4,000, and in Ireland one to every 7,700.

Investment Companies.

In addition to the Banks of Issue, there are numerous Savings Banks, and Land, Building, Investment, Trading, and Commercial Companies receiving money on deposit and transacting much of the business usually undertaken only by banks of issue. The land, building, and other trading companies were presumed to be in a flourishing condition even as late as the year 1890. Their dividends to shareholders were very large, and the rates allowed on deposits were considerably in excess of those current in the banks of issue. As might be expected, the high interest offered was too tempting a bait to be resisted by a section of the investing public, and large sums were placed in these institutions

with the utmost confidence that they would be available when required. This confidence, unfortunately, proved to be, in many instances, unmerited. The shrinkage of land values, and the depreciation of real estate generally, put an end to all unsound institutions working on speculative lines, as well as to some other companies that were conducted on reasonable principles. The difficulties into which the deposit companies fell may for the most part be attributed to their practice of borrowing money for short periods, and locking it up for long terms. Besides this, however, many so-called building societies indulged in speculative land purchases, and having retailed the land at enhanced prices, with payments over extended periods, proceeded to divide the presumed profits among the shareholders; with a result that might easily have been foreseen, for in many cases the purchasers, after paying a few instalments toward the price, left the allotments on the hands of the companies, whose anticipated profits were therefore purely visionary, and whose dividends were really never earned, but, in many instances, were merely taken from the deposits.

Savings Banks.

The Savings Banks are on a very different footing, being to a greater or less extent under State control and otherwise safeguarded, so that they enjoy public confidence. The institutions classed as Savings Banks may be divided into two kinds—those worked in conjunction with the Post Office, and, consequently, directly administered by the State; and those under trustees or commissioners, who are generally nominated by the Government. The declared objects of these banks are to encourage thrift in the working classes, and to provide a safe investment for the funds of charitable institutions, friendly societies, and such like. The institutions, however, have become so popular that all classes of the community are represented amongst their depositors, and the banking crisis of 1893 had the effect of largely increasing their business.

In New South Wales there are both State and trustee institutions for the receipt of savings, the Post Office Savings Bank having been established in 1871, and the Savings Bank of New South Wales as far back as 1832. In both institutions sums of one shilling and any multiple of that amount may be deposited; but, with the exception of the funds of charitable institutions and friendly societies, deposits exceeding £200 do not bear interest on such excess. From October, 1894, to July, 1896, the Post Office Savings Bank allowed interest at the rate of 3 per cent., with an additional 1 per cent. on accounts open for the full calendar year, but this latter privilege has now been withdrawn. During 1899 the Savings Bank of New South Wales allowed 3 per cent. interest on accounts closed during the year, or remaining open at the end of the year. A measure providing for the amalgamation

of the two institutions has been presented to Parliament, but up to the present the Bill has not been passed.

In Victoria both Commissioners' and Post Office Savings Banks, established in 1842 and 1865 respectively, were in operation until the 30th September, 1897, when they were amalgamated under the Savings Bank Amendment Act of 1896, the Commissioners assuming the control of the new institution. Amounts of one shilling and any multiple thereof are received. The Act referred to further provided for advances to farmers and others, and this portion of the Act was brought into operation without delay. During 1898–9 interest was allowed at the rate of 2½ per cent. on sums not exceeding £100, and 2 per cent. from £100 to £250, the latter being the maximum amount carrying interest.

In Queensland, a Government Savings Bank, not administered in connection with the Post Office, is in operation, the system dating from 1865. The interest allowed during 1895 was 3½ per cent. on all deposits below £200; but from July, 1896, the rate was reduced to 3 per cent. In December, 1895, authority was obtained for the issue of Savings Bank Stock at 3 per cent. to enable depositors of upwards of £200 to obtain interest on such excess, as it was found that large sums were entrusted to the Government which could not earn interest under the old constitution of the Bank.

In South Australia there is, properly speaking, no Government Savings Bank; but an institution administered by trustees was established in 1848. The rate of interest paid by the trustees has been the subject of many changes. Starting at 3 per cent., it fell as low as 1 per cent. in 1853; rose to 6 per cent. in 1858; and declined to 4 per cent. in 1873. Between the year last mentioned and 1892, interest fluctuated between 5½ and 4½ per cent.; and in 1893 it was reduced to 4 per cent., at which it remained during the years 1894 and 1895, while in 1896 and 1897 it was still further reduced to 3½ per cent. and 3 per cent. respectively, the latter rate being allowed in 1898 and 1899, the maximum amount bearing interest being £250.

In Western Australia, Post Office banks have been in operation since 1864. One shilling and upwards may be received, provided not more than £150 is deposited in any one year, while the maximum amount of deposits must not exceed £600. Interest is allowed at the rate of 3 per cent. provided the amount at credit is not less than £1, and not more than £300.

In Tasmania, Post Office and trustee banks are working side by side. Sums of one shilling and upwards may be deposited, the interest allowed being 3 per cent. both in the Post Office banks and in the trustee institutions. Interest is not allowed on amounts over £150.

In New Zealand, Post Office and trustee institutions are also established. The former commenced operations in February, 1867; but some of the other class of banks are of much older standing, the Auckland Savings Bank, for instance, having been established as far back as 1847. Deposits of one shilling and upwards are received. Interest

was formerly allowed in both classes of institutions at the rate of 4½ per cent. up to £200, and 4 per cent. from £200 to £500; but in July, 1893, the rates allowed in the Government Savings Bank were reduced to 4 per cent. and 3½ per cent. respectively, the maximum amount bearing interest remaining at £500. These rates remained in force until the 1st January, 1896, when the interest was reduced to 3½ per cent. and 3 per cent. respectively; while from the 1st November, 1897, a further reduction was made, the rates ruling from that date being 3 per cent. up to £200, and 2½ per cent. from £200 to £500. The trustee Savings Banks in 1895 allowed 4 per cent., but reduced this rate to 3½ per cent. from the beginning of 1896. In 1897 the interest was increased to 4 per cent. on amounts under £100. A feature of the New Zealand Post Office Savings Bank is that deposits of one shilling may be made by means of postage stamps affixed to cards specially issued for the purpose. This plan was adopted to encourage thrift among children. It was recognised to be a difficult matter for a child to save its pence until they accumulated to a shilling; but under the present system, whenever a child receives a penny it may purchase a postage stamp and affix it to the card in its possession.

The returns of the Savings Banks show an enormous development since the year 1861. At that period the number of depositors in Australasia (excluding Tasmania, for which there are no returns) was 20,062, with the sum of £1,367,396 to their credit, or an average of £47 to each depositor. In 1871 the number of depositors had risen to 115,074, with deposits amounting to £3,675,772; but the average amount credited to each depositor was only £31 18s. 10d. In the year 1881 there were 311,124 depositors, with a total of £9,442,979, averaging £30 7s. for each account. In 1891 the number of depositors had increased to 741,627, and the amount of deposits to £18,943,541, the average being £25 10s. 1d. In 1899–1900 the number of depositors had risen to 1,123,092, with deposits amounting to £34,352,879, giving an average sum of £30 11s. 9d. to each account. It will thus be seen that there has been a decline in the amount per depositor from the period first mentioned; but this is no sign of retrogression, for the large increase in the number of depositors, which must be taken into consideration, evidences the fact that the less affluent classes of the community are more largely represented in the books of the banks than was formerly the case. In point of fact, the proportion of depositors to the entire population has increased all along. Thus, in 1861 the number of persons who had accounts in the Savings Banks represented only 2·31 per cent. of the entire population of Australasia; but in 1871 the percentage had risen to 5·98; in 1881, to 11·33; and in 1891, to 19·47; while in 1899–1900 the proportion was 24·99 per cent., an increase being observable in all the colonies. Dealing with the individual colonies, the Queensland depositors have the largest amount at their credit, averaging £41 15s. 9d. per head; New South Wales depositors come second with £38 12s. 1d.; while those of Tasmania have the smallest sum, their average being only

£22 18s. 5d. The subjoined table shows the progress of accumulation in the Savings Banks of each of the colonies since 1871 :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia	Western Australia	Tasmania.	Commonwealth.	New Zealand.	Australasia.
Number of Depositors.									
1871	24,379	45,819	6,769	14,270	1,062	8,500	100,799	14,275	115,074
1881	72,384	101,829	20,168	37,742	3,219	14,728	250,070	61,054	311,124
1891	158,426	300,781	46,259	78,795	3,564	26,916	614,741	126,886	741,627
1899–1900	260,826	375,070	89,748	119,435	33,918	39,923	909,920	213,172	1,123,092
Amount of Deposits.									
	£	£	£	£	£	£	£	£	£
1871	945,915	1,117,761	407,134	517,000	15,583	217,413	3,220,806	454,966	3,675,772
1881	2,698,703	2,569,438	944,251	1,288,450	23,344	369,278	7,893,464	1,549,515	9,442,979
1891	5,342,135	5,715,687	1,660,753	2,217,419	46,181	554,417	15,536,592	3,406,949	18,943,541
1899–1900	10,069,434	9,110,818	3,374,126	3,489,082	1,266,058	915,063	28,224,581	6,128,298	34,352,879
Average Amount per Depositor.									
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1871	38 16 0	24 7 11	60 2 11	36 4 7	14 13 6	25 11 7	31 19 0	31 17 5	31 18 10
1881	37 5 8	25 4 7	46 16 5	34 2 9	7 5 0	25 1 6	31 11 4	25 7 7	30 7 0
1891	33 14 5	19 0 1	35 18 0	28 2 10	12 19 2	20 12 0	25 5 6	26 17 0	25 10 1
1899–1900	38 12 1	24 5 10	41 15 9	29 4 3	37 6 6	22 18 5	31 0 4	28 15 0	30 11 9

The following table shows the average amount per head of population, and the average number of depositors per 100 of population, in each of the colonies for the year 1899–1900 :—

State.	Average amount per head of Population.	Depositors per 100 of Population.
	£ s. d.	
New South Wales	7 8 5	19
Victoria	7 16 0	32
Queensland	6 19 11	17
South Australia	9 8 11	32
Western Australia	7 2 1	19
Tasmania	5 0 5	22
Commonwealth	7 11 1	24
New Zealand	8 2 0	28
Australasia	7 12 11	25

It will be observed that Victoria and South Australia had the largest number of depositors per 100 of population ; while the largest amount per head of population was reached in South Australia.

The following table shows the number of depositors in the savings banks of the principal countries of the world, the total amount standing

at their credit, and the average amount per depositor. The figures are compiled from the latest available returns :—

Country.	Depositors.	Amount of Deposits in Savings Bank.	Average Amount per Depositor.
	No.	£	£ s. d.
United Kingdom	9,194,449	173,139,471	18 16 8
Sweden	1,636,852	23,767,487	14 10 5
Norway	615,234	15,078,570	24 10 2
Holland	988,918	11,649,250	11 15 7
Austria-Hungary	4,649,650	158,097,253	34 0 0
Belgium	1,377,643	21,283,273	15 9 0
Italy	4,969,463	76,668,507	15 8 7
France	9,665,058	170,852,183	17 13 7
Denmark	1,090,433	36,580,729	33 10 11
United States	5,687,818	458,923,241	80 13 8
*Canada	191,461	10,337,801	53 19 11
Australasia	1,123,092	34,352,879	30 11 9

* Exclusive of special Savings Banks—particulars not available.

The figures for the United States are given on the authority of the official *Statistical Abstract*, and are, to all appearances, correct.

Total Deposits in Banks.

If to the amounts deposited in the savings banks of the colonies be added the deposits in banks of issue, it will be seen that the total sum on deposit in banking institutions is equal to over £31 for each inhabitant of Australasia. The largest amount on deposit as compared with population is found in Queensland, with £34 13s. 6d., or £3 7s. 1d. above the average of all the colonies. The particulars for each province will be found below :—

State.	Deposits in Banks of Issue (Averages for the second quarter of 1900.)	Deposits in Savings Banks, 1899-1900.	Total Deposits.	Amount of Deposits per head of Population.
	£	£	£	£ s. d.
New South Wales	32,656,232	10,069,434	42,725,666	31 9 11
Victoria	30,640,375	9,110,818	39,751,193	34 0 7
Queensland	13,352,461	3,374,126	16,726,587	34 13 6
South Australia	6,290,760	3,489,082	9,779,842	26 9 7
Western Australia	4,408,213	1,266,058	5,674,271	31 16 11
Tasmania	3,173,639	915,063	4,088,702	22 8 7
Commonwealth	90,521,680	28,224,581	118,746,261	31 15 6
New Zealand	15,866,914	6,128,298	21,995,212	29 1 6
Australasia	106,388,594	34,352,879	140,741,473	31 6 5

As already mentioned, large sums are also deposited with various building and investment societies, but the returns with reference to these are incomplete. The latest available figures show that the amounts so invested were :—In New South Wales, £1,132,305 ; in Victoria, £718,725 ; in Tasmania, £141,946 ; and in New Zealand, £209,489.

In the following table are given the deposits in banks, including savings banks, and, where available, building societies, etc., at four decennial periods, as well as for the year 1899–1900 :—

State.		1861.	1871.	1881.	1891.	1899-1900.
		£	£	£	£	£
New South Wales		5,645,108	7,989,801	23,006,720	42,988,550	43,857,971
Victoria		7,575,406	12,476,677	23,721,348	50,183,551	40,469,918
Queensland		334,503	1,647,830	5,633,097	12,154,657	16,726,587
South Australia		875,320	2,038,719	6,231,004	9,992,338	9,779,842
Western Australia		*2,487	*15,583	*23,344	1,365,906	5,674,271
Tasmania		†729,085	875,512	2,969,390	4,220,292	4,230,648
Commonwealth	Total	15,161,909	25,044,122	61,584,903	120,905,294	120,739,237
	Per head	£13	£15	£27	£38	£32
New Zealand		905,675	3,789,639	10,618,893	17,497,436	22,204,701
Australasia	Total	16,067,584	28,833,761	72,203,796	138,402,730	142,943,938
	Per head	£13	£15	£26	£36	£32

*Savings Banks only. † Banks of Issue only.

From this table it will be seen that the increase of deposits in all classes of banks between 1861 and 1881 was exactly 100 per cent., allowing for the growth of population ; while between 1871 and 1891 the deposits per head of population increased by 140 per cent. When compared with the figures for Great Britain, the amount of deposits per head of population in Australasia far exceeds that in the older country. In 1861, indeed, the sum per head in Great Britain was higher than in Australasia, amounting to £15 as against £13 in the colonies, and in 1874 the British average stood at £25 per head ; but ten years later, in 1884, it had sunk to £23, and in 1890 to £16 ; while in 1899 the rate per head had increased to about £24. In the colonies there was no falling-off at any period until 1893—the total deposits per head in 1888 far exceeding the highest level ever reached in Great Britain. In 1893, however, there was a decline of about ten millions in the sum total of Australasian deposits ; that is to say, the commercial depression which prevailed more or less throughout Australasia during that year caused the amount just mentioned to be withdrawn from the savings of the people and to be employed in meeting current expenses and in the maintenance of credit. During 1894 and 1895 there was a further falling-off in Victoria and Tasmania ; but the other colonies showed larger deposits in 1895 than in 1893—the Queensland, Western Australia, and New Zealand deposits being even larger

than in 1891. In 1899–1900 the savings in all the colonies except South Australia, where a decrease of about £22,000 took place, were greater than in 1895, the net increase in the five years being over twelve and a half millions, while, compared with 1891, there was an increase of over four and a half millions. It will thus be seen that the States have entirely recovered from the effects of the financial crisis of 1893.

In some of the colonies the *Credit Foncier* system has been established in connection with the Savings Banks, and particulars relating to the operations of the system will be found in the chapter dealing with Agriculture.

Currency.

The coins circulating in Australasia are those of the United Kingdom. Gold is the standard, the silver and bronze current being more properly tokens than coins. Gold coins are legal tender to any amount, silver for an amount not exceeding forty shillings, and bronze for one shilling. The standard weight and fineness of each coin are given below. The least current weight of a sovereign is 122·5 Imperial grains, and of a half-sovereign, 61·125 grains :—

Denomination of Coin.		Standard Weight.	Standard Fineness.
		Imperial grains. Troy.	
Gold	Sovereign	123·27447	Eleven-twelfths fine gold, one-twelfth alloy, or decimal fineness ·91666.
	Half-sovereign	61·63723	
Silver	Crown	436·36363	Thirty-seven-fortieths fine silver, three-fortieths alloy, or decimal fineness ·925.
	Double Florin	349·09090	
	Half-crown	218·18181	
	Florin	174·54545	
	Shilling	87·27272	
	Sixpence	43·63636	
	Threepence	21·81818	
		Avoirdupois.	
Bronze	Penny	145·83333	Mixed metal :—Copper, 95 parts ; tin, 4 parts ; and zinc, 1 part.
	Halfpenny	87·50000	
	Farthing	43·75000	

It may be stated here that in Queensland there is a legal paper currency in the shape of Treasury notes, which have now superseded the ordinary bank-notes.

The only coins struck at the Sydney, Melbourne, and Perth Mints are of gold, though silver and bronze of English coinage are also issued. The

amounts of silver and bronze issued during 1899 were, at the Sydney Mint, silver, £61,800, and bronze, £2,830; and at the Melbourne Mint, £45,200 and £2,720 respectively. No silver or bronze coin was issued at the Perth Mint during 1899. The Sydney Branch of the Royal Mint was opened on the 14th May, 1855, the Melbourne Branch on the 12th June, 1872, and a third branch was established at Perth on the 20th June, 1899. The amount of gold received for coinage up to the end of 1899, at the Sydney Mint, was 25,102,432 oz., valued at £93,256,493; the amount received at the Melbourne Mint to the same date was 22,413,389 oz., valued at £88,708,702; while at the Perth Branch the amount received was 201,314 oz., the value being £732,165.

The following table shows the quantity of gold received into the three Mints to the end of 1899, the metal received from outside sources being distinguished from that locally produced :—

Where produced.	Gold received for Coinage.		
	Sydney Mint.	Melbourne Mint.	Perth Mint.
	oz.	oz.	oz.
New South Wales	9,158,698	77,096	.....
Victoria	1,442,958	16,243,524	.....
Queensland	11,290,965	10,574	.....
South Australia	81,482	529,553	.....
Western Australia	9,700	2,331,316	201,314
Tasmania	47,811	870,093	.....
New Zealand	2,773,844	2,149,971	.....
Other Countries	36,177	190,581	.....
Old Coin, etc.	260,797	10,681	.....
Total	25,102,432	22,413,389	201,314

The total value of gold raised in Australasia to the end of 1899 was £428,408,833, of which amount 43 per cent. passed through the Sydney, Melbourne, and Perth Mints.

The following table shows the amount of gold coin and bullion issued by each Mint to the end of 1899 :—

Mint.	Sovereigns.	Half-sovereigns.	Bullion.	Total Value of Coin and Bullion issued.
	£	£	£	£
Sydney	87,090,500	2,737,500	3,248,895	93,076,895
Melbourne	81,696,578	490,902	6,518,196	88,705,676
Perth	690,992	.....	3	690,995
Total	169,478,070	3,228,402	9,767,094	182,473,566

The quantity of gold received into the Sydney Mint in 1899 was 948,742 oz., valued at £3,384,281, of which only 243,553 oz., or about

26 per cent., were the produce of New South Wales. Queensland contributed 531,945oz., or about 56 per cent. of the whole, while of the remainder, 145,395 oz. came from New Zealand, and 18,933 oz. from Tasmania. The amount of gold received into the Melbourne Mint for the same year was 1,520,739 oz., of which 872,742 oz., or 57 per cent., were the produce of Victoria, while 33 per cent. came from Western Australia, notwithstanding the fact that the Perth Mint was opened on the 30th June, 1899.

The gold coins issued from the Sydney Mint in 1899 comprised 3,259,000 sovereigns, and 130,000 half-sovereigns, while the Melbourne Mint issued 5,579,157 sovereigns and 97,221 half-sovereigns, and the Perth Mint, 690,992 sovereigns during the year.

The value of the gold coinage issued from Sydney, Melbourne, Perth, and London Mints during the year 1899 was as follows :—

	£
Sydney	3,324,006
Melbourne	5,627,767
Perth	690,992
London	8,520,311

Besides gold coin, the Sydney Mint during 1899 issued gold bullion to the value of £48,446 ; the Melbourne Mint to the value of £207,503 ; and the Perth Mint to the value of £3.

The annual report of the Deputy-Master of the Royal Mint for 1899 shows the value of silver coin issued to and withdrawn from, and the value of bronze coin issued to each of the Australasian colonies during the twenty-eight years 1872–99, to have been as follows :—

State.	Silver Coin.			Bronze Coin issued.
	Issued.	Withdrawn.	Net Issue.	
	£	£	£	£
New South Wales	764,700	172,593	592,107	39,850
Victoria	879,350	291,080	588,270	36,535
Queensland	245,995	4,750	241,245	3,100
South Australia	259,600	2,176	257,424	12,505
Western Australia	67,700	3,927	63,773	1,870
Tasmania	50,400	23,443	26,957	1,320
Commonwealth	2,267,745	497,969	1,769,776	95,180
New Zealand	231,535	.....	231,535	14,385
Australasia	2,499,280	497,969	2,001,311	109,565

These figures show an annual increase in the circulation of silver of £71,500, and of bronze of £3,900, but no allowance is made in the figures for coin brought to the colonies or taken away by passengers.

Complete information regarding worn coin is not available for the Melbourne Mint ; the following figures, therefore, refer to Sydney only.

From 1873, when the Mint first received worn silver coin, until 1899, the amount of silver withdrawn from circulation was of the nominal value of £182,917. The actual weight after melting was 584,696 oz., and the corresponding weight of new coinage would be 665,151 oz. The loss while the coins were in circulation was therefore 80,455 oz., the average loss being 12·10 per cent. From 1876 to 1899 gold coin of the nominal value of £825,757 was received at the Sydney Mint for recoinage, and was found to have an actual value of £823,020. The loss amounted, therefore, to £2,737, or 0·33 per cent.

As has already been pointed out, standard silver consists of ·925 pure metal and ·075 alloy. A pound troy of standard silver is coined into sixty-six shillings; that is to say, 11·1 ounces of fine metal produce coin to the value of £3 6s. The average price of silver during 1899 was 2s. $3\frac{7}{16}$d. per ounce, which for 11·1 ounces gives the sum of £1 5s. $4\frac{1}{2}$d.; so that, after making due allowance for Mint expenses and loss entailed by abrasion of the coinage, it is evident that the British Government derives a fairly large profit from the silver coin issued to Australasia. This explains why the Governments of New South Wales and Victoria have approached the Imperial authorities for permission to coin silver to the value required for circulation in the colonies. With the present limited population of Australasia, however, it is doubtful whether the profits would do more than pay for the outlay necessary in connection with the minting.

Life Assurance.

All the colonies except New South Wales have special laws regulating the business of life assurance. Except that of Queensland, the Life Assurance Acts require yearly statements to be made showing the total business of companies in operation, and also certain particulars regarding the transactions within their own colony. In New South Wales no special law has been passed, and companies doing this class of business are either registered under the Companies or Friendly Societies Act, or incorporated by special Act. In the other colonies the Acts regulating the business of life assurance deal chiefly with deposits to be made by companies commencing business, and with returns of business transacted. In no province are the full returns officially published; nevertheless, interesting and valuable reports are prepared and circulated by several of the companies, and all information reasonably to be desired is given in their pages. Other companies pursue a different course, and disclose very few particulars of their business. However, from such sources as are available, the information contained in the following pages has been compiled.

Of the sixteen companies doing business in the colonies, four have their head-offices in New South Wales, six in Victoria, one in South Australia, one in New Zealand, one in the United Kingdom, and three in the United States. The English company—the Liverpool and London and Globe Insurance Company—has only lately commenced

operations in Australia, and as the only particulars concerning its business which are available are the number of policies in force on the 31st March, 1896 (1,028), the total sum assured exclusive of bonuses (£566,647), and the amount of the annual premiums (£15,627), the company is not enumerated in the following tables. The Mutual Assurance Society of Victoria was amalgamated with the National Mutual Life Association at the beginning of 1897, and consequently the figures in the tables show the transactions of the new company.

The results of the latest published actuarial investigations of the various societies are appended :—

Institution.	Year of Foundation.	Basis of Valuation.	Date of last Valuation.	Net or Present Liability.	Surplus.
		per cent.		£	£
Australian Mutual Provident Society	1849	3½ (a)	31 Dec., 1899	15,973,081	16,539,264
Mutual Life Association of Australasia	1869	4 (q)	31 ,, 1899	1,234,990	1,372,331
City Mutual Life Assurance Society (Ltd.) ..	1879	4 (t)	31 ,, 1897	153,085	165,224
*Citizens' Life Assurance Company (Ltd.) ..	1886	3½ (a)	31 ,, 1899	267,299	301,122
Australian Alliance Assurance Company	1862	3½ (t)	31 ,, 1897	273,827	†552,508
National Mutual Life Association of Australasia (Ltd.)	1869	4 (t)	30 Sept., 1898	2,545,718	2,835,357
‡Australian Widows' Fund Life Assurance Society (Ltd.).....	1871	3½ (q)	31 Oct., 1899	1,311,108	1,379,275
Colonial Mutual Life Assurance Society (Ltd.)	1874	3½ (q)	31 Dec., 1899	2,071,579	2,391,882
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	1876	3½ (q)	30 Sept., 1895	*165,427	§226,217
Victoria Life and General Insurance Company	1858	3 (d)	30 June, 1900	128,951	364,018
Adelaide Life Assurance and Guarantee Company	1866	4 (q)	30 June, 1892	18,322	22,124
New Zealand Government Life Insurance Department	1870	3½ (t)	31 Dec., 1899	2,871,081	3,071,581
Equitable Life Assurance Society of the United States.....	1859	4 (a)	31 ,, 1899	45,640,377	58,373,185
New York Life Insurance Company	1845	4 (a)	31 ,, 1899	40,126,515	48,652,335
Mutual Life Insurance Company of New York	1843	4 (a)	31 ,, 1899	52,439,998	62,884,279

(a) Annual. (t) Triennial. (q) Quinquennial. (d) Decennial.
* Ordinary Branch only. † Includes Fire, Marine, and Guarantee branches.
‡ Interim investigation only. § Includes assets of Industrial branch.

The net or present liability represents the present value of the sums assured in respect of whole life and endowment assurance, reversionary bonuses, endowments, and annuities in force at date of valuation, less the present value of the future pure premiums thereon.

Of these fifteen companies, ten are mutual, and the remainder are what is termed in insurance parlance "mixed"—that is, proprietary companies dividing profits with the policy-holders. Two of the institutions also transact industrial business, while one company also undertakes fire and guarantee risks, and another does guarantee as well as life business. Most of the offices have representatives in all the colonies. Three institutions have extended their operations to London, and one also to South Africa. The New Zealand Government does not transact any business outside that colony.

The following table gives the policies in force and the sums assured in each society at the close of 1899. The item "Sums assured" means

the sums payable, exclusive of reversionary bonuses, at death, or on attaining a certain age, or at death before that age :—

Institution.	Policies in force, exclusive of Annuities.	Assurances.			Annual Premium Income.
		Sums Assured, exclusive of Bonuses.	Bonus Additions.	Total.	
	No.	£	£	£	£
Australian Mutual Provident Society	151,150	45,528,090	8,815,731	54,343,821	1,489,416
Mutual Life Association of Australasia	18,307	4,944,577	224,657	5,169,234	166,388
City Mutual Life Assurance Society (Ltd.)	8,153	1,099,751	42,327	1,142,078	44,659
‖Citizens' Life Assurance Company (Ltd.)	22,733	3,231,590	86,197	3,317,787	124,356
Australian Alliance Assurance Company	1,325	464,942	40,255	505,197	15,840
National Mutual Life Association of Australasia (Ltd.)	46,890	10,632,539	844,976	11,477,515	348,922
Australian Widows' Fund Life Assurance Society (Ltd.)	21,185	4,561,863	190,888	4,752,751	167,656
Colonial Mutual Life Assurance Society (Ltd.)	33,536	10,593,726	273,200	10,866,926	328,884
‖Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	7,498	1,170,896	15,569	1,186,465	40,157
*Victoria Life and General Insurance Co.	381	182,432	36,286	218,718	5,457
†Adelaide Life Assurance and Guarantee Company	107	38,600	.....	38,600	886
New Zealand Government Life Insurance Department	39,366	9,558,166	783,536	10,341,702	280,684
‡Equitable Life Assurance Society of the United States	8,985	4,098,452	§	4,098,452	¶
‡Mutual Life Insurance Company of New York	3,063	1,623,954	¶	1,623,954	63,618
‡New York Life Insurance Company	4,477	2,008,582	§	2,008,582	88,127
Total	367,156	99,738,160	11,353,622	111,091,782	3,165,050

* Year ended June, 1897. † Year ended December, 1895. ‡ Australasian business only.
§ Included in preceding column. ‖ Ordinary branch only. ¶ Not available.

The following table shows the assurances in force at the close of each of the last three years :—

Institution.	Amount Assured, excluding Bonuses and Annuities.		
	1897.	1898.	1899.
	£	£	£
Australian Mutual Provident Society	41,726,041	43,426,002	45,528,090
Mutual Life Association of Australasia	4,537,640	4,681,723	4,944,577
City Mutual Life Assurance Society (Ltd.)	958,094	1,021,607	1,099,751
‡Citizens' Life Assurance Company (Ltd.)	1,798,740	2,659,554	3,231,590
Australian Alliance Assurance Company	524,354	496,090	464,942
National Mutual Life Association of Australasia (Ltd.)	9,888,494	10,149,914	10,632,539
Australian Widows' Fund Life Assurance Society (Ltd.)	4,314,052	4,367,405	4,561,863
Colonial Mutual Life Assurance Society (Ltd.)	10,425,370	10,474,868	10,593,726
‡Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	956,391	1,002,898	1,170,896
Victoria Life and General Insurance Company	182,432	*	*
Adelaide Life Assurance and Guarantee Company	*	*	*
New Zealand Government Life Insurance Department	9,002,601	9,304,742	9,558,166
†Equitable Life Assurance Society of the United States	3,863,382	3,951,914	4,098,452
†Mutual Life Insurance Company of New York	1,411,284	1,487,094	1,623,954
†New York Life Insurance Company	1,831,700	1,911,698	2,008,582

* Information not available. † Australasian business only, but inclusive of bonus additions, except for the Mutual Life of New York, for which the information relating to bonuses is not available. ‡ Ordinary branch only.

The receipts of the societies are chiefly represented by the collections from premiums on policies and the interest arising from investments of the accumulated funds; while payments on account of policies matured and surrendered, cash bonuses, and expenses of management chiefly comprise the disbursements. The receipts and disbursements during 1899 of each society having its head office in Australasia, were as follow:—

Institution.	Receipts.	Expenditure.	Excess Receipts (Addition to Funds).
	£	£	£
Australian Mutual Provident Society	2,243,644	1,347,953	895,691
Mutual Life Association of Australasia	233,525	131,766	101,759
City Mutual Life Assurance Society (Ltd.)	50,075	35,635	14,440
*Citizens' Life Assurance Company (Ltd.)	124,841	41,377	83,464
Australian Alliance Assurance Company	27,751	27,775	†24
National Mutual Life Association of Australasia (Ltd.)	499,753	313,822	185,931
Australian Widows' Fund Life Assurance Society (Ltd.)	224,181	166,315	57,866
Colonial Mutual Life Assurance Society (Ltd.)	409,744	286,134	123,610
*Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	49,777	37,278	12,499
Victoria Life and General Insurance Company	14,062	10,329	3,733
Adelaide Life Assurance and Guarantee Company	781	.....	781
New Zealand Government Life Insurance Department	421,569	285,422	136,147
Total	4,299,703	2,683,806	1,615,897

* Ordinary branch only. † Decrease.

The aggregate receipts and disbursements of the twelve Australasian institutions during 1899 were as follow:—

Receipts.		Expenditure.	
	£		£
Premiums—			
New	329,403	Claims	1,482,876
Renewals	2,619,886	Surrenders	437,797
Consideration for Annuities	82,896	Annuities	48,930
Interest	1,262,495	Cash Bonuses and Dividends	76,107
Other Receipts (Rents, etc.)	5,023	Expenses	597,600
		Amount written off to Depreciation, Reserves, etc	40,496
Total £	4,299,703	Total £	2,683,806

It will be seen that the combined amount of interest earned and rents received was insufficient to meet the demands under the head of claims. The difference to be made good from other sources, however, was small. A similar condition of affairs has obtained since 1894; but for many years prior to that date the amount earned more than met the expenditure on account of claims. The change just indicated may be attributed to two causes, firstly, the large number of discontinuances which have followed in the train of the depression, so that when the new business has been set against that which has lapsed, the net

result is either only a slight increase or even a shrinkage in the volume of assurances in force, and, secondly, the lower rate of interest lately realised on investments, which in 1899 only amounted to 4·56 per cent., as against 5·54 per cent. in 1893.

Assets and Liabilities of Assurance Companies.

The societies publish annually a statement of assets and liabilities, with the object of showing the distribution of the accumulated funds and the amount placed to commercial reserve. The return is, however, in no way connected with the valuation balance-sheet prepared at the date of the actuarial investigation. The assets and liabilities for each institution, for the financial year of 1899, were as shown in the subjoined table :—

Institution.	Assets.			Liabilities.		
	Loans on Mortgages and Policies.	Government and Municipal Securities, Freehold Property, Cash on Deposit, etc., etc.	Total.	Assurance Endowment and Annuity Funds.	Paid-up Capital, Reserve Funds, etc., etc.	Total.
	£	£	£	£		£
Australian Mutual Provident Society	12,483,730	4,055,534	16,539,264	16,074,741	464,523	16,539,264
Mutual Life Association of Australasia	846,286	526,045	1,372,331	1,359,363	12,968	1,372,331
City Mutual Life Assurance Society (Ltd.)	122,926	71,106	194,032	191,366	2,666	194,032
*Citizens' Life Assurance Company (Ltd.)	99,656	201,466	301,122	297,559	3,563	301,122
†Australian Alliance Assurance Company	262,734	258,559	521,293	273,154	248,139	521,293
National Mutual Life Association of Australasia (Ltd.)	2,026,079	1,054,049	3,080,128	2,951,502	128,626	3,080,128
Australian Widows' Fund Life Assurance Society (Ltd.)	1,042,876	336,399	1,379,275	1,368,770	10,505	1,379,275
Colonial Mutual Life Assurance Society (Ltd.)	1,217,200	1,174,682	2,391,882	‡2,385,266	6,616	2,391,882
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	§171,134	§86,525	§257,659	*228,224	§29,435	§257,659
Victoria Life and General Insurance Company	193,362	170,657	364,019	234,593	129,426	364,019
¶Adelaide Life Assurance and Guarantee Company	16,684	37,453	54,137	37,711	16,426	54,137
New Zealand Government Life Insurance Department	1,892,939	1,178,642	3,071,581	2,997,681	73,900	3,071,581
Total £	20,375,606	9,151,117	29,526,723	28,399,930	1,126,793	29,526,723

* Ordinary branch only. † Inclusive of Fire, Marine, and Guarantee Branches, which cannot be separated. ‡ Includes the Investment Fluctuation Fund. § Inclusive of the Industrial Branch. ¶ Inclusive of Guarantee Branch.

Loans on mortgages and policies represent rather more than two-thirds of the total assets, and in former years the investment of funds was almost exclusively confined to these securities; but of late years the operations in Government stocks, municipal loans, and other securities and shares have greatly increased. The remaining items require no special comment, except loans on personal security, combined with life assurance. Investments of this character are unusual in Australasia, and are decreasing each year, the amount invested aggregating only £66,760. In some of the colonies the companies are obliged by law to deposit certain sums with the Treasury as a guarantee of good faith, and the amount so lodged is included either under the head of Government securities or of deposits.

Expenses of Management of Assurance Companies.

The ratio of expenses of management to premium income and gross receipts must necessarily vary according to the age of the society and the proportion of new business transacted. The figures are given for what they are worth. That a more exact comparison cannot be made is the fault of certain companies which fail to make a complete disclosure of their affairs, and do not distribute their expenses of management so that the cost of new business may be distinguished from that of old business; the reports of other companies are unequalled in any part of the world:—

Institution.	Expenses of Management.		
	Amount.	Proportion to—	
		Premium Income.	Gross Receipts.
	£	per cent.	per cent.
Australian Mutual Provident Society	212,070	14·38	9·38
Mutual Life Association of Australasia	46,707	27·72	20·00
City Mutual Life Assurance Society (Ltd.)	11,023	27·24	22·01
*Citizens' Life Assurance Company (Ltd.)	18,726	17·11	14·99
Australian Alliance Assurance Company	3,731	22·29	13·44
National Mutual Life Association of Australasia (Ltd.)	90,152	25·55	18·04
Australian Widows' Fund Life Assurance Society (Ltd.)	48,297	30·03	21·54
Colonial Mutual Life Assurance Society (Ltd.)	74,860	23·57	18·27
*Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	17,019	43·91	34·19
Victoria Life and General Insurance Company	1,594	35·80	11·34
Adelaide Life Assurance and Guarantee Company	†.....	†.....	†.....
New Zealand Government Life Insurance Department	59,639	20·70	14·15

* Ordinary Branch only. † Included in expenses of guarantee branch.

Assurance in various Countries.

The average amount assured per policy for each colony, and for the United Kingdom, Canada, and the United States, is given in the following table. The figures in some instances are probably somewhat

overstated, as all the companies do not show complete returns of the business in each colony; but the results may be taken as a fair estimate for each province. The Australasian business of the American institutions excluded from the previous returns, has been included for the purpose of establishing the Australian averages :—

Country.	Average sum assured per Policy.	Average Premium per £100 of Assurance.
	£	£ s. d.
Australasia	272	3 3 6
New South Wales	316	3 1 10
Victoria	253	3 3 11
Queensland	299	2 19 1
South Australia	243	3 5 8
Western Australia	324	2 19 2
Tasmania	268	3 4 0
New Zealand	258	3 0 10
United Kingdom	360	.....
United States	477	.....
Canada	338	.....

The average amount of assurance per head of population was, in Australasia, £22; in Canada, £15; in the United Kingdom, £15; and in the United States £17; while the average number of policies per thousand of population was, in Australasia, 82; in Canada, 46; in the United Kingdom, 43; and in the United States, 35.

The average policy is scarcely a fair measure of thrift. In these colonies mutual assurance is the rule, and members of the various societies have acquired large bonus additions. The average existing policy, including reversionary bonus, of the Australasian companies, on the 31st December, 1899, was £302, as compared with the £272 shown in the comparative table.

It would seem that the practice of assuring life is much more prevalent in Australasia than in any of the other countries instanced; and although the average sum assured by each policy is less, the number of policies is so much greater, as compared with the population, that the amount assured per inhabitant is considerably higher.

Friendly Societies.

The services which friendly societies directly render to the State in enabling the labouring classes to combine for the making of due provision to meet unforeseen demands in the case of sickness or death, are clearly recognised by the Governments of the various colonies, and all such societies which are registered according to law are granted certain privileges in consideration of the important part which they play in the

social welfare of the community, in relieving the public purse of claims which would otherwise have to be preferred against it, and in maintaining the independence of their members and obviating the necessity of those members accepting aid which would have a tendency to pauperise them. The Acts regulating the operations of friendly societies in the colonies are all based on English legislation; and, generally speaking, the following privileges, which are granted to members of such societies in the colony of New South Wales, may be taken as typical of those enjoyed in Australasia :—

1. A registered Society can legally hold land and other kinds of property in the names of trustees, such property passing from one trustee to another by the mere fact of appointment; and can carry on all legal proceedings in the trustees' names.
2. The Society has a remedy on summary conviction whenever any person—
   (*a*) Obtains possession of its property by false representation or imposition;
   (*b*) Having possession of any of its property, withholds or misapplies it;
   (*c*) Wilfully applies any part of such property to purposes other than those expressed or directed by the rules and authorised by the Act.
3. If an officer of the Society dies or becomes bankrupt or insolvent, or if an execution is issued against him whilst he has money or property of the Society in his possession by virtue of his office, the trustees of the Society are entitled to claim such money or property in preference to any other creditors.
4. The documents of the Society are free from stamp duty.
5. The Society can admit members under twenty-one and take from them binding receipts, which would otherwise be of no effect.
6. If it invests money on mortgage, such mortgages can be discharged by a mere endorsed receipt without reconveyance.
7. Its officers are legally bound to render account and give up all money or property in their possession on demand or notice, and may be compelled to do so.
8. Disputes can be legally settled according to the Society's own rules.
9. Members of registered Friendly Societies have the privilege of legally insuring money, on the deaths of their wives and children, for their funeral expenses, without having an insurable interest in their lives.

10. Members of registered Societies may dispose at death of sums payable by the Society by written nomination without a will; and this nomination may be made by youths of sixteen who cannot make a will till they are twenty-one.
11. Where there is no will and no nomination, the trustees may distribute sums without letters of administration being taken out (a person doing so in any other case would make himself liable for the debts of the deceased).

The Acts contain provisions inserted with the object of securing the solvency of the societies. In most of the colonies these provisions have been operative; but in others the position of some of the orders is not so satisfactory as it should be.

In the following table will be found the number of societies, the number of lodges or branches of these societies, the aggregate number of members, the total amount of their funds, and the average amount per member in each of the colonies. The figures are for the latest available periods, the dates being set forth below :—

State.	Date.	Societies.	Lodges or Branches.	Members.	Total Funds.	Average Amount of Funds per member.
		No.	No.	No.	£	£ s. d.
New South Wales	31 Dec., 1898	68	774	70,287	612,104	8 14 2
Victoria	31 Dec., 1898	31	1,088	88,726	1,173,960	13 4 8
Queensland	31 Dec., 1899	13	360	29,099	222,084	7 12 8
South Australia	31 Dec., 1895	15	487	42,703	475,654	11 2 9
Western Australia	31 Dec., 1898	15	68	4,543	35,409	7 15 11
Tasmania	31 Dec., 1898	15	130	11,871	95,202	8 0 5
Commonwealth	.....	157	2,907	247,229	2,614,413	10 11 4
New Zealand*	31 Dec., 1897	12	388	32,670	637,011	19 10 0
Australasia		169	3,295	279,899	3,251,424	11 12 4

* Exclusive of 33 isolated, specially authorised societies, and 13 working men's clubs.

It will be seen from the foregoing table that, taking the average amount of funds per member as the basis of comparison, New Zealand occupies first position with the sum of £19 10s.; Victoria comes next with £13 4s. 8d.; South Australia takes third place with £11 2s. 9d. per member; New South Wales comes next with £8 12s. 7d.; and then follow Tasmania and Western Australia in the order named, with £8 0s. 5d. and £7 15s. 11d. respectively; Queensland having the smallest amount, viz., £7 12s. 8d., to the credit of each individual member.

Money Orders.

The business transacted in the various Postal Departments under the system of money orders has grown to very large dimensions. This increase is due mainly to the greater facilities now afforded for the transmission of money by this method, though it is also to some extent attributable to the more general appreciation of the system by the

working classes. The following is a statement of the business transacted during 1899 :—

State.	Orders issued.		Orders paid.	
	Number.	Amount.	Number.	Amount.
		£		£
New South Wales	421,085	1,436,927	418,855	1,466,602
Victoria	223,335	681,962	280,139	943,672
Queensland	143,253	518,140	91,760	370,672
South Australia	87,256	246,476	79,853	277,110
Western Australia	173,532	655,812	86,438	312,239
Tasmania	130,554	265,968	233,203	330,094
Commonwealth	1,179,015	3,895,285	1,190,248	3,700,389
New Zealand	344,664	1,118,808	245,377	950,337
Australasia	1,523,679	4,924,093	1,435,625	4,650,726

The average amount of each money order issued was £3 4s. 8d., and the business done by New South Wales greatly exceeded that of any other colony of the group. The average value of money orders issued in the United Kingdom during 1899 was £2 19s. 1d.

Postal Notes.

Besides the money orders mentioned above, a system of postal notes is in force in all the colonies. The notes are issued for fixed amounts, varying from 1s. to 20s. The number and value of notes issued and paid during 1899 in each of the colonies were as follow :—

State.	Notes issued.		Notes paid.	
	Number.	Amount.	Number.	Amount.
		£		£
New South Wales	1,251,302	449,948	1,246,715	449,657
Victoria	1,241,400	489,235	1,269,234	497,765
Queensland	273,868	105,981	243,490	95,539
South Australia	....	.....	273,061	90,400
Western Australia	47,247	121,691	.....	.....
Tasmania	56,114	16,884	52,711	16,357
Commonwealth	*2,869,931	*1,183,739	†3,085,211	†1,149,718
New Zealand	461,447	147,686	457,767	146,779
Australasia	3,331,378	*1,331,425	†3,542,978	†1,296,497

* Exclusive of South Australia. † Exclusive of Western Australia.

These figures show that, for the transmission of small amounts, postal notes are rapidly superseding money orders. While in 1899 the number of money orders issued was less than half that of postal notes, the value of the latter was only slightly over one-fourth of the value of money orders, the average value of postal notes being 8s., as compared with £3 4s. 8d. for money orders.

BANKRUPTCIES.

The bankruptcy laws of the different colonies are even more dissimilar than the laws on most other questions of importance; they have also been fluctuating, and the subject of many experiments and amendments. This renders any work of comparison difficult and unsatisfactory. For the year 1899 returns are available for New South Wales, Queensland, South Australia, and Tasmania, and are given below, while the figures for the other colonies are for 1898. In connection with the table it must be pointed out that the figures are exclusive of 66 liquidations in Queensland, with liabilities stated at £83,395, and assets at £58,484; and also of 141 private arrangements under the Insolvency Act in South Australia, for which the assets and liabilities are not stated:—

State.	Number of Sequestrations.	As shown in Bankrupts' Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
New South Wales...	612	321,913	175,345	146,568
Victoria	594	513,240	261,308	251,932
Queensland.....	355	104,960	24,465	80,495
South Australia.....	32	13,069	10,085	2,984
Western Australia..	157	228,790	171,261	57,529
Tasmania	57	13,791	5,326	8,465
Commonwealth	1,807	1,195,763	647,790	547,973
New Zealand	407	285,854	187,900	97,954
Australasia.....	2,214	1,481,617	835,690	645,927

Little, if any, reliance can be placed upon the statements made by bankrupts as to the state of their affairs, the assets being invariably exaggerated. Taking the figures given above for what they are worth, it would appear that the average amount of liabilities per bankrupt was £669, and of assets, £377, showing a deficiency of £292. In the following table the average figures for the last ten years for which returns are available are given, except where radical alterations in bankruptcy legislation, or the absence of complete returns for the whole period, have made it necessary to take a shorter period; the

assets, however, have been omitted, as the statements, as far as some of the colonies are concerned, are palpably worthless :—

State.	Number of Sequestrations.	Liabilities, as shown in Bankrupts' Schedules.
		£
New South Wales	1,145	1,091,654
Victoria	863	3,181,690
Queensland	339	147,394
South Australia	69	89,411
Western Australia	68	145,469
Tasmania	122	65,185
Commonwealth	2,606	4,720,803
New Zealand	532	542,684
Australasia	3,138	5,263,487

PUBLIC FINANCE.

THE functions of Government are much alike throughout Australasia, and it is only to be expected, therefore, that similar items of expenditure should be found in the budgets of the various colonies. The chief point of difference is the extent to which local requirements are provided for out of general revenue. In most of the provinces provision for local improvements is a matter of which the State has long since divested itself; but in New South Wales and Western Australia the central government still charges itself with the construction of works of a purely local character, especially in the rural districts; hence the appearance, in the statements of public expenditure of those colonies, of items of large amount which find no parallel in the other provinces. Also, when comparison is made with outside countries, other points of difference are found. In these colonies, as in other young communities, it has been necessary for the State to initiate works and services which in older countries have come within the province of the local authorities or have naturally been left to be undertaken by private enterprise. Even at the present day it is deemed advisable that the Government should retain the control of services, such as the railways, which in the United Kingdom and some other countries are not generally regarded as forming part of the functions of the State, and it is on account of the administration of these services that the budgets of the Australasian colonies reach such comparatively high figures.

The revenues of the Australasian colonies are subject to considerable fluctuations, due not so much to changes in the incidence of the revenue, as to variation in the amount of the imports, for it is upon taxation of imports that the revenues of the colonies most largely depend. The years of highest revenue ought, under normal conditions, to be coincident with the years of greatest prosperity; but some of the colonies have been able to efface the effect of unfavourable seasons by lavish borrowing, and the inflow of loans, as represented by taxable goods, has, at times, more than counterbalanced the shrinkage in the imports, due to failure in the wool or wheat crops, for which these imports are payment. This effect of the borrowing policy of the various states is, however, only to a slight extent visible in the following table; during the previous five

years (1886-1890) it was much more strongly marked, for in that short period the various States Governments contrived to borrow and spend £53,374,000, obtained in London. The unsteadiness of the railway revenue, due to variations in the seasons, is another cause of disturbance to Australian finance, and one which will not be obviated until the resources of the colonies are so developed that wool and wheat will no longer play the important part they do at present in the railway trade of the country. In 1895 large reductions were made in the New South Wales tariff; these account for a reduction in the revenue of the colony during that and subsequent years, while to other influence must be added the financial crisis of 1893, which had a numbing effect upon trade throughout the colonies comprised in the Commonwealth. It will be observed from the table that the serious changes manifest in the figures relating to the more important of the mainland colonies, are absent from those of Western Australia and New Zealand. The financial position of Western Australia is exceptional, being due to the opening up of the goldfields, and the influx of a large amount of capital, and, as the tariff was of a wide range, the importation necessarily involved a large customs revenue, and increased earnings on the part of the railway service. The configuration of the colony of New Zealand renders it to a very great extent immune from the droughts that so much effect the mainland of Australia, and the financial crisis of 1893 had only a comparatively slight influence on its trade; the progress of trade in that colony was, therefore, fairly regular during the years when the finances of the mainland colonies were most disturbed. The revenue for each colony during the past ten years is shown in the following table:—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£	£	£	£	£	£	£	£	£
1890	9,305,691	*8,343,588	*3,350,223	*2,804,727	414,314	758,100	24,976,643	4,496,028	29,472,671
1891	9,772,325	*7,729,572	*3,473,716	*2,811,267	497,670	883,199	25,167,749	4,428,530	29,596,279
1892	10,065,602	*6,959,229	*3,445,943	*2,525,525	*575,822	787,764	24,359,885	4,669,551	29,029,436
1893	9,499,309	*6,716,814	*3,343,069	*2,591,271	*681,246	706,972	23,538,681	4,692,463	28,231,144
1894	9,349,436	*6,712,152	*3,413,172	*2,497,648	*1,125,941	696,795	23,795,144	4,447,899	28,243,043
1895	*9,074,991	*6,458,682	*3,641,583	*2,585,230	*1,858,695	761,971	24,381,152	†4,556,015	28,937,167
1896	*9,107,208	*6,630,217	*3,613,150	*2,698,759	*2,842,751	797,976	25,690,061	†4,798,708	30,488,769
1897	*9,304,253	*6,898,240	*3,768,152	*2,633,727	*2,754,747	845,019	26,204,138	†4,079,230	31,283,368
1898	*9,572,912	*7,378,842	*4,174,086	*2,731,208	*2,478,811	908,223	27,244,082	†5,258,228	32,502,310
1899	*9,973,736	*7,450,676	*4,588,207	*2,853,329	2,875,396	943,970	28,685,314	†5,699,618	34,384,932

* Year ended 30th June next following. † Year ended 31st March next following.

The revenue per inhabitant for each colony during the past ten years is as follows :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1890	8 8 11	*7 7 3	*8 10 6	*8 15 7	9 4 2	5 5 6	8 0 0	7 4 9	7 17 9
1891	8 11 1	*6 13 7	*8 13 8	*8 12 8	9 19 1	5 18 7	7 16 2	7 0 7	7 13 7
1892	8 10 10	*5 19 5	*8 8 6	*7 10 0	*9 16 4	5 3 1	7 7 7	7 5 5	7 7 3
1893	7 17 6	*5 14 10	*8 0 0	*7 9 5	*10 9 5	4 12 0	7 0 2	7 1 11	7 0 5
1894	7 11 10	*5 14 5	*7 19 4	*7 1 11	*13 14 5	4 9 5	6 19 0	6 11 0	6 17 8
1895	*7 3 0	*5 10 1	*8 5 1	*7 5 0	*18 7 2	4 15 10	6 19 3	†6 11 0	6 17 11
1896	*7 1 6	*5 13 10	*8 0 6	*7 10 6	*20 12 2	4 17 8	7 4 3	†6 15 1	7 2 9
1897	*7 1 11	*5 18 7	*8 3 8	*7 5 11	*17 0 3	5 0 1	7 4 6	†7 0 1	7 3 9
1898	* 3 6	*6 7 2	*8 17 1	*7 9 7	*14 14 10	5 4 2	7 8 4	†7 2 2	7 7 4
1899	*7 7 0	*6 8 1	*9 10 3	*7 13 11	*16 16 3	5 5 0	7 14 1	†7 11 4	7 13 7

* Year ended 30th June next following. † Year ended 31st March next following.

The following statements show that the expenditure of the six Commonwealth colonies has increased from £26,047,595 in 1890, to £28,094,513 for the year ended 30th June, 1900, while the amount per inhabitant has decreased from £8 7s. 2d. to £7 10s. 11d. The expenditure of the seven colonies has increased, during the same period from £30,417,161 to £33,234,641, while the amount per inhabitant has decreased from £8 2s. 9d. to £7 8s. 6d. The expenditure for each colony during the past ten years is set forth in the following table :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£	£	£	£	£	£	£	£	£
1890	9,385,669	*9,128,699	*3,684,655	*2,724,089	401,737	722,746	26,047,595	4,369,566	30,417,161
1891	10,214,813	*8,482,917	*3,625,281	*2,803,269	435,623	851,559	26,413,462	4,417,843	30,831,305
1892	10,081,412	*7,989,757	*3,557,620	*2,784,145	*629,372	919,802	25,962,108	4,324,990	30,287,098
1893	10,061,842	*7,310,246	*3,351,536	*2,749,081	*656,357	836,417	24,965,479	4,455,116	29,420,595
1894	9,331,380	*6,760,439	*3,308,434	*2,661,934	*936,729	789,806	23,788,722	4,266,712	28,055,434
1895	*9,672,873	*6,540,182	*3,567,947	*2,640,688	*1,823,863	748,946	24,994,499	†4,370,481	29,364,980
1896	*9,436,300	*6,568,932	*3,604,264	*2,779,110	*2,839,453	750,244	25,978,303	†4,509,981	30,488,284
1897	*9,219,940	*6,692,444	*3,747,428	*2,750,959	*3,256,912	785,026	26,452,709	†4,602,372	31,055,081
1898	*9,553,237	*7,027,415	*4,024,170	*2,777,614	*2,539,358	830,168	26,751,962	†4,858,511	31,610,473
1899	*9,811,402	*7,318,945	*4,540,418	*2,936,619	*2,615,675	871,454	28,094,513	†5,140,128	33,234,641

* Year ended 30th June next following. † Year ended 31st March next following.

The expenditure per inhabitant for each colony for the last ten years is as follows :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1890	8 10 4	*8 1 1	*9 7 6	*8 10 7	8 18 7	5 0 7	8 7 2	7 0 8	8 2 9
1891	8 18 10	*7 6 8	*9 1 2	*8 12 2	8 15 0	5 14 4	8 3 10	7 0 3	8 0 0
1892	8 11 1	*6 17 2	*8 13 11	*8 5 4	*10 14 7	6 0 4	7 17 4	6 14 8	7 13 7
1893	8 6 10	*6 4 11	*8 0 4	*7 18 6	*10 1 9	5 8 10	7 8 7	6 14 9	7 6 4
1894	7 11 7	*6 15 3	*7 14 5	*7 11 3	*11 8 3	5 1 4	6 19 0	6 5 8	6 16 9
1895	*7 12 5	*5 11 5	*8 1 9	*7 8 1	*18 0 4	4 14 2	7 2 9	†6 5 8	6 19 11
1896	*7 6 8	*5 16 10	*8 0 1	*7 15 0	*20 11 8	4 11 10	7 5 10	†6 7 0	7 2 9
1897	*7 0 8	*5 15 1	*8 2 9	*7 12 5	*20 2 3	4 13 0	7 5 11	†6 6 11	7 2 9
1898	*7 3 3	*6 1 2	*8 10 8	*7 12 2	*15 2 1	4 15 ·2	7 5 8	†6 11 4	7 3 3
1899	*7 4 8	*6 5 10	*9 8 3	*7 18 5	*15 5 10	4 17 0	7 10 11	†6 16 6	7 8 6

* Year ended 30th June next following. † Year ended 31st March next following.

In the colonies of New South Wales, Victoria, Queensland, South Australia, and Western Australia, the financial year ends on the 30th June; in Tasmania, on the 31st December; and in New Zealand, on the 31st March. Below will be found a statement showing the total revenue and expenditure of each colony for the financial year 1899–1900, with the amounts per head of population. It must be pointed out that from the revenue and expenditure of New South Wales, Victoria, South Australia, Tasmania, and New Zealand, as given in the table, refunds are excluded; while for Queensland and Western Australia there is nothing in the published statements to show whether the amounts are gross or net :—

State.	Year ended—	Total.		Per head of population.	
		Revenue.	Expenditure.	Revenue.	Expenditure.
		£	£	£ s. d.	£ s. d.
New South Wales	30 June, 1900..	9,973,736	9,811,402	7 7 0	7 4 8
Victoria	30 June, 1900..	7,450,676	7,318,945	6 8 1	6 5 10
Queensland	30 June, 1900..	4,588,207	4,540,418	9 10 3	9 8 3
South Australia*	30 June, 1900..	2,853,329	2,936,619	7 13 11	7 18 6
Western Australia	30 June, 1900..	2,875,396	2,615,675	16 16 3	15 5 10
Tasmania	31 Dec., 1899..	943,970	871 454	5 5 0	4 17 0
Commonwealth	.....	28,685,314	28,094,513	7 14 1	7 10 11
New Zealand	31 Mar., 1900..	5,699,618	5,140,128	7 11 4	6 16 6
Australasia	.....	34,384,932	33,234,641	7 13 7	7 8 6

* Including Northern Territory.

As will be seen from the table, the revenue of the colonies included in the Commonwealth for the financial year 1899–1900 was

£28,685,314, or £7 14s. 1d. per head of population, and the expenditure £28,094,513, or £7 10s. 11d per head, showing a total surplus on the twelve months' transactions of £590,801. The revenue of the whole of the seven colonies of Australasia was £34,384,932, or £7 13s. 7d. per head of population, and the expenditure £33,234,641, or £7 8s. 6d. per head, showing a surplus of £1,150,291. The colonies which had a surplus were New South Wales, Victoria, Queensland, Western Australia, Tasmania, and New Zealand; while South Australia showed a deficit. In regard to South Australia, it may be stated that the revenue and expenditure of the colony proper were £2,780,858 and £2,779,317 respectively, and of the Northern Territory, £72,471 and £157,302. The deficit on the year's transactions was, therefore, wholly due to the administration of the great area north of the 26th degree of south latitude.

Sources of Revenue.

The revenue of the colonies is mainly derived from taxation and public services. During the year 1899–1900 the customs and excise duties of the colonies forming the Commonwealth yielded £7,629,027, and other forms of taxation, £2,419,484; while the railways and tramways returned a revenue of £10,632,908, and posts and telegraphs £2,240,431; making altogether a sum of £22,921,850 derived from these sources, or 79·9 per cent. of the total receipts. The corresponding figures for the whole of Australasia were:—Customs and excise duties, £9,816,886; other forms of taxation, £3,122,751; railways and tramways, £12,254,521; posts and telegraphs, £2,728,677, giving a total of £27,922,835, or 81·2 per cent. of a total revenue of £34,384,932. A division of the revenue of each colony is appended:—

State.	Taxation.		Railways and Tramways	Posts and Telegraphs.	Public Lands.	All Other Sources.	Total Revenue.
	Import and Excise Duties.	Other.					
	£	£	£	£	£	£	£
New South Wales	1,735,621	881,692	3,563,377	800,481	2,108,433	884,132	9,973,736
Victoria	2,267,141	673,817	3,010,795	558,193	375,267	565,463	7,450,676
Queensland	1,601,354	383,359	1,422,852	309,471	618,743	252,428	4,588,207
South Australia	643,075	259,287	1,184,378	272,081	157,116	337,392	2,853,329
Western Australia	933,716	121,921	1,258,945	208,109	129,526	223,179	2,875,396
Tasmania	448,120	99,408	192,561	92,096	71,203	40,582	943,970
Commonwealth	7,629,027	2,419,484	10,632,908	2,240,431	3,460,288	2,303,176	28,685,314
New Zealand	2,187,859	703,267	1,621,613	488,246	262,229	436,404	5,699,618
Australasia	9,816,886	3,122,751	12,254,521	2,728,677	3,722,517	2,739,580	34,384,932

Below will be found a statement of the revenue in 1899–1900 on the basis of population. The average for the colonies included in the Commonwealth was £7 14s. 1d., and for the whole of Australasia was £7 13s. 7d. per head, the amount ranging from £5 5s. in Tasmania to £16 16s. 3d. in Western Australia. The high revenue in the latter colony is attributable to the influx of foreign capital consequent on the

discovery of the gold-fields. As most of the goods entering the colony are subject to duty, a large importation of capital necessarily means a large customs revenue and increased traffic and earnings of the railways :—

State.	Taxation,		Railways and Tramways.	Posts and Telegraphs.	Public Lands.	All Other Sources.	Total Revenue.
	Import and Excise Duties.	Other.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	1 5 7	0 13 0	2 12 6	0 11 10	1 11 1	0 13 0	7 7 0
Victoria	1 19 0	0 11 7	2 11 9	0 9 7	0 6 5	0 9 9	6 8 1
Queensland	3 6 5	0 15 11	2 19 0	0 12 10	1 5 8	0 10 5	9 10 3
South Australia	1 14 8	0 14 0	3 3 11	0 14 8	0 8 6	0 18 2	7 13 11
Western Australia	5 9 2	0 14 3	7 7 3	1 4 4	0 15 2	1 6 1	16 16 3
Tasmania	2 9 10	0 11 1	1 1 5	0 10 3	0 7 11	0 4 6	5 5 0
Commonwealth	2 1 0	0 13 0	2 17 1	0 12 0	0 18 7	0 12 5	7 14 1
New Zealand	2 18 1	0 18 8	2 3 1	0 13 0	0 6 11	0 11 7	7 11 4
Australasia	2 3 10	0 13 11	2 14 9	0 12 2	0 16 8	0 12 3	7 13 7

It will be seen that the colony with the highest revenue from customs and excise duties as compared with population is Western Australia, New South Wales being at the other end of the scale. A false impression, however, is apt to be gathered from a bare statement of the amounts per head, as it might be assumed that the provinces with the least revenue are the most lightly taxed, while those with large revenues are heavily burdened. As a matter of fact, the truth is often the reverse of this ; for a low consumption of dutiable goods under a high tariff might give no greater revenue than a high consumption under a lower tariff.

Dividing the revenue derived from taxation into that payable (*a*) directly and (*b*) indirectly by the people, the former including land and income taxes, stamp duties, etc., and the latter customs and excise, license fees, etc., the appended figures are obtained :—

State.	Total Taxation, 1899–1900.			Per head of population.		
	Direct.	Indirect.	Total.	Direct.	Indirect.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	761,394	1,855,919	2,617,313	0 11 3	1 7 4	1 18 7
Victoria	655,927	2,285,031	2,940,958	0 11 3	1 19 4	2 10 7
Queensland	319,030	1,665,683	1,984,713	0 13 3	3 9 1	4 2 4
South Australia	237,832	664,530	902,362	0 12 10	1 15 10	2 8 8
Western Australia	94,937	960,700	1,055,637	0 11 1	5 12 4	6 3 5
Tasmania	69,168	478,360	547,528	0 7 8	2 13 3	3 0 11
Commonwealth	2,138,288	7,910,223	10,048,511	0 11 6	2 2 6	2 14 0
New Zealand	703,267	2,187,859	2,891,126	0 18 8	2 18 1	3 16 9
Australasia	2,841,555	10,098,082	12,939,637	0 12 8	2 5 1	2 17 9

Comparing these figures with the returns for the year 1881, which are given below, it will be found that the general tendency has been to

increase the direct taxation of the people, on account of the diminished land sales and the shrinkage in other revenue. The yield from indirect taxation shows a slight increase in Victoria, Queensland, and Tasmania, and a large increase in Western Australia; the other states show decreases. Excepting in the case of New South Wales, which had in 1900 a much more restricted tariff list than in 1881, the more recent tariffs of the Australian colonies are framed on a higher scale than the earlier ones. The yield obtained, however, has not been commensurate with the increase in the duties. This, of course, is the ordinary result of high duties, even where they have had no effect on local production :—

State.	Total Taxation, 1881.			Per Inhabitant.		
	Direct.	Indirect.	Total.	Direct.	Indirect.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	192,503	1,578,345	1,770,848	0 5 0	2 1 3	2 6 3
Victoria	347,782	1,635,345	1,983,127	0 8 1	1 18 0	2 6 1
Queensland	49,311	608,443	657,754	0 4 7	2 16 7	3 1 2
South Australia	14,522	569,617	584,139	0 1 1	2 2 7	2 3 8
Western Australia	1,206	114,919	116,125	0 0 10	3 17 10	3 18 8
Tasmania	66,748	283,398	350,146	0 11 5	2 8 6	2 19 11
Commonwealth	672,072	4,790,067	5,462,139	0 5 11	2 1 11	2 7 10
New Zealand	405,802	1,480,507	1,886,309	0 16 6	3 0 1	3 16 7
Australasia	1,077,874	6,270,574	7,348,448	0 7 10	2 5 8	2 13 6

In respect of the proportion of revenue raised at the present time by taxation, the colonies differ considerably. Thus, no less than 58·0 per cent. of the revenue of Tasmania in 1899–1900 was derived from that source; while in New Zealand the proportion was 50·7 per cent.; in Queensland, 43·2 per cent.; in Victoria, 39·4 per cent.; in Western Australia, 36·7 per cent.; in South Australia, 31·6 per cent.; and in New South Wales, only 26·3 per cent. The comparison, however, is only interesting as showing the large territorial revenue that New South Wales is fortunate enough to possess.

In all the colonies probate duties are levied, and in all the colonies except Western Australia and Queensland, land and income taxes. In Queensland the only incomes taxed are the dividends of joint-stock companies, and in Western Australia a dividend and companies tax has also been introduced since the close of the financial year 1898–9. In the edition of this work for 1895–6 the changes in the probate and succession duties, and in the land and income taxes, were traced; the description given below deals only with the duties as they stand at the present time.

Probate and Succession Duties.

New South Wales.—In this colony a duty of 1 per cent. was payable to the end of the year 1899 on the value of the real and personal estate of a testator or intestate, and on settlements of property taking effect

after death, provided the value of the property was less than £5,000; 2 per cent. was payable on estates of the value of £5,000 and under £12,500; 3 per cent. upon £12,500 and under £25,000; 4 per cent. upon £25,000 and under £50,000; and 5 per cent. upon £50,000 and upwards. Estates not exceeding £200 in gross value were exempt from duty. On the 22nd December, 1899, an amending Act was assented to, under which the following duties on the estates of deceased persons are now payable:—

Exceeding—	Not exceeding—	Rate.	Exceeding—	Not exceeding—	Rate.
£	£	per cent.	£	£	per cent.
.....	1,000	Nil.	34,000	36,000	6⅖
1,000	5,000	2	36,000	38,000	6⅔
5,000	6,000	3	38,000	40,000	6⅘
6,000	7,000	3⅕	40,000	44,000	7
7,000	8,000	3⅖	44,000	48,000	7⅕
8,000	9,000	3⅗	48,000	52,000	7⅖
9,000	10,000	3⅘	52,000	56,000	7⅗
10,000	12,000	4	56,000	60,000	7⅘
12,000	14,000	4⅕	60,000	64,000	8
14,000	16,000	4⅖	64,000	68,000	8⅕
16,000	18,000	4⅗	68,000	72,000	8⅖
18,000	20,000	4⅘	72,000	76,000	8⅗
20,000	22,000	5	76,000	80,000	8⅘
22,000	24,000	5⅕	80,000	84,000	9
24,000	26,000	5⅖	84,000	88,000	9⅕
26,000	28,000	5⅗	88,000	92,000	9⅖
28,000	30,000	5⅘	92,000	96,000	9⅗
30,000	32,000	6	96,000	100,000	9⅘
32,000	34,000	6⅕	100,000	.....	10

Only one-half of these rates is payable on the net amount received by the widow, children, and grandchildren of the testator or intestate, provided the total value of the estate is not more than £50,000 after all debts have been paid.

Victoria.—The succession duties in force in Victoria are the same as those levied in New South Wales under the 1899 Act, with the exception that on estates exceeding £1,000, but not exceeding £5,000, an exemption of £1,000 is allowed in Victoria. The conditions as to half-rates payable by widows, children, and grand-children, on amounts received by them, are the same as in New South Wales.

Queensland.—A succession duty of 2 per cent. is levied in Queensland on property acquired by a person on the death of its former owner when the value of the property is £200 and under £1,000; 3 per cent. is chargeable upon property valued at £1,000 and under £2,500; 4 per cent. upon £2,500 and under £5,000; 6 per cent. upon £5,000 and under £10,000; 8 per cent. upon £10,000 and under £20,000; and 10 per cent. upon £20,000 and upwards. When the successor is

the wife or husband or lineal issue of the predecessor, one-half of these rates only is charged; and when the successor is a stranger in blood to the predecessor double rates are charged. The following small probate duties are also payable on the net value of the property:—

Value.	Probates.	Letters of Administration.
Under £50	Nil.	Nil.
£50 and not exceeding £100	10s.	£1.
Over £100 and not exceeding £200	£1.	£2.
,, £200 ,, ,, £500	£2.	£4.
,, £500	£5.	£10.

Succession duty is chargeable on all property held within the colony, although the testator or intestate may have been domiciled elsewhere; but power is taken to compound the duty and to accept one sum in respect of all successions, present and future, where the deceased has been domiciled in the United Kingdom or a British possession, and it has been found difficult to assess the value of the succession. Also, where the British Government or the Government of a British possession exempts from duty property held in Queensland by a person domiciled in the United Kingdom or the British possession referred to, no duty is chargeable by the Queensland Government on property held in the United Kingdom or such British possession by a person domiciled in the colony.

South Australia.—Succession duties are imposed on real and personal property derived from the estate of a deceased person; on settlements of property to take effect after the death of the settlor; and on property made over by deed of gift during the lifetime of the donor, and not made before and in consideration of marriage, or in favour of a *bona fide* purchaser or encumbrancer for valuable consideration. The duty is levied on the net present value, and is fixed at 10 per cent. when the legatee or beneficiary is a stranger in blood to the person from whom the property is received. When the person taking the property is the widow, widower, descendant, or ancestor, it is subject to a duty of 1½ per cent. if the value is £500 and under £700; if £700 and under £1,000, 2 per cent.; £1,000 and under £2,000, 3 per cent.; £2,000 and under £3,000, 3½ per cent.; £3,000 and under £5,000, 4 per cent.; £5,000 and under £7,000, 4½ per cent.; £7,000 and under £10,000, 5 per cent.; £10,000 and under £15,000, 5½ per cent.; £15,000 and under £20,000, 6 per cent.; £20,000 and under £30,000, 6½ per cent.; £30,000 and under £40,000, 7 per cent.; £40,000 and under £60,000, 7½ per cent.; £60,000 and under £80,000, 8 per cent.; £80,000 and under £100,000, 8½ per cent.; £100,000 and under £150,000, 9 per cent.; £150,000 and under £200,000, 9½ per cent.; and £200,000 and upwards, 10 per cent.; one-half of these rates only to be charged when the person taking the property is the child (under 21 years of age) or the widow of the deceased, and the net present value of the whole estate is under £2,000. When the property is taken by a brother or

sister, or a descendant of a brother or sister, or a person in any other degree of collateral consanguinity to the deceased person, settlor, or donor, a duty of 1 per cent. is charged if the net present value is under £200; if £200 and under £300, 1½ per cent.; £300 and under £400, 2 per cent.; £400 and under £700, 3 per cent.; £700 and under £1,000, 3½ per cent.; £1,000 and under £2,000, 4 per cent.; £2,000 and under £3,000, 5 per cent.; £3,000 and under £5,000, 6 per cent.; £5,000 and under £10,000, 7 per cent.; £10,000 and under £15,000, 8 per cent.; £15,000 and under £20,000, 9 per cent.; and £20,000 and upwards, 10 per cent.

Western Australia.—Probate duty is payable on the estates of deceased persons, and upon settlements of property to take effect after the death of the donor, with the exception of ante-nuptial settlements, on all post-nuptial settlements made in pursuance of an agreement entered into before marriage, all settlements, on or for the wife, or her issue, or the issue of the settlor, of property which has accrued to the settlor after the marriage in right of his wife; and upon all settlements made in favour of a purchaser or encumbrancer in good faith and for valuable consideration. The duty is imposed on the net value of the estate after all debts have been paid. The lowest sum subject to taxation is £1,500, and this sum is likewise exempted when the net value of the estate is less than £2,500, but when this value is exceeded no exemption is made. The rates of duty are as follow:—

£1,500 and under	£2,500 (on excess of £1,500)	1	per cent.
£2,500 ,,	£5,000	2	,,
£5,000 ,,	£10,000	3	,,
£10,000 ,,	£20,000	4	,,
£20,000 ,,	£30,000	5	,,
£30,000 ,,	£40,000	6	,,
£40,000 ,,	£60,000	7	,,
£60,000 ,,	£80,000	8	,,
£80,000 ,,	£100,000	9	,,
Over £100,000		10	,,

with half these rates when the beneficiaries comprise the parent, issue, husband, wife, or issue of husband or wife of the deceased.

Tasmania.—In this colony duties are imposed on probates of wills and letters of administration. The duty is levied on the net value of the personal estate of the testator or intestate. When the amount is under £100 no duty is payable; when it is £100 and not more than £500 the duty is 2 per cent.; and when it is £500 and upwards the duty is 3 per cent. Life policies are exempt from taxation.

New Zealand.—The following duties are imposed in New Zealand on the final balance of the real and personal property left by a testator or intestate; on settlements of property taking effect after the death of the settlor; and on property made over by deed of gift taking effect during the lifetime of the donor, and not being property granted before

and in consideration of marriage, or in favour of a *bona-fide* purchaser or encumbrancer in return for valuable consideration:—

Not exceeding £100	Nil.
£100 and not exceeding £1,000—	
On first £100	Nil.
On remainder	2½ per cent.
Over £1,000 and not exceeding £5,000	3½ ,,
Over £5,000 and up to £20,000	7 ,,
On £20,000 and upwards	10 ,,

with 3 per cent. additional in the case of strangers in blood, except adopted children. It is provided that no duty shall be payable on property passing absolutely into the possession of the widow of the deceased, or of the widower of the deceased; and that only half-rates shall be payable on property acquired by the children, step-children, and grand-children of the testator or intestate. It is further provided that in the case of property in which a life estate or interest is acquired by the widow on the death of her husband, or by the widower on the death of his wife, payment of duty shall be made in ordinary course if the property possesses a capital value which would give an annual return of not less than £500 if invested at 6 per cent., and when the property is of lower value the widow or widower shall obtain a refund not exceeding 50 per cent. of the duty.

Land and Income Taxation in New South Wales.

In New South Wales, land tax is levied on the unimproved value; the present rate being 1d. in the £. An exemption of £240 is allowed, and if the unimproved value is in excess of this sum a deduction equal to the exemption is made, but when a person or company holds several blocks of land only one sum of £240 may be deducted from the aggregate unimproved value. Also, when a block of land is mortgaged, the mortgagor is allowed to deduct from the amount of his tax a sum which is equal to the income tax chargeable to the mortgagee on the interest derived from the mortgage of the whole property, including improvements. The exemptions from taxation comprise Crown lands not subject to right of purchase, or held under special or conditional lease, or as homestead selections; other lands vested in Her Majesty or her representatives; lands vested in the Railway Commissioners; lands belonging to or vested in local authorities; public roads, reserves, parks, cemeteries, and commons; lands occupied as public pounds, or used exclusively for or in connection with public hospitals, benevolent institutions, and other public charities, churches and chapels, the University and its affiliated colleges, the Sydney Grammar School, and mechanics' institutes and schools of arts; and lands dedicated to and vested in trustees and used for zoological, agricultural, pastoral, or horticultural show purposes, or for other public or scientific purposes. Should the tax remain unpaid for a period of two years after it becomes due the Commissioners may, after giving another year's notice, let the land for a period not exceeding three years, or, with the permission of a Judge

of the Supreme Court, sell so much of it as may be necessary for the payment of the tax, with fines, costs, and expenses added.

A tax is also imposed upon so much of every income as may be in excess of £200, except in so far as it is derived from the ownership or use or cultivation of land upon which land tax is payable ; the present rate being 6d. in the £. The exemptions include the revenues of local authorities ; the income of life assurance societies and of other societies and companies not carrying on business for purposes of profit or gain, and not being income derived from mortgages ; the dividends and profits of the Savings Bank of New South Wales and the Post Office Savings Bank ; the funds and income of registered friendly societies and trade unions ; the income and revenues of all ecclesiastical, charitable, and educational institutions of a public character ; and income accruing to foreign investors from Government stock. The regulations provide that in the case of every company its income shall be taken as the income of the company in New South Wales and from investments within the colony. Public companies are not allowed the exemption of £200.

Land and Income Taxation in Victoria.

The Land Tax Act in force in Victoria was passed with the object of breaking up large holdings. For this purpose it was declared that all "landed estates" should be subject to taxation ; that a "landed estate" should consist of one or more blocks of land not more than 5 miles apart which possessed an aggregate area of upwards of 640 acres and a capital value of more than £2,500 ; that the value in excess of £2,500 should be taxed at the rate of $1\frac{1}{4}$ per cent. per annum, but that only one exemption should be allowed to a person or company owning more than one "landed estate" ; and that the assessment of the capital value of the "landed estate" should be based upon the average number of sheep which it was estimated to be able to maintain, £4 per acre being fixed as the value of land which could carry 2 sheep or more to that area ; £3 per acre if it could carry only $1\frac{1}{2}$ sheep ; £2 per acre if it could carry only 1 sheep, and £1 if it could not maintain an average of a single sheep to the acre.

The rate of income tax payable in the colony varies according to the source whence the income is derived and the taxable amount of such income. On incomes derived from personal exertion 4d. in the £ is payable up to £1,200 ; on every £ in excess of this sum up to £2,200, 6d. ; and on every £ in excess of £2,200, 8d. ; double these rates being payable on incomes the produce of property within the colony. All incomes of and under £200 escape taxation, and this sum is exempted in all cases in which the income is higher. Land and buildings used by the owner for residential purposes are regarded as returning an income of 4 per cent. on the capital value ; and the income of companies whose head office is not within the colony is taken to be such a proportion of the total dividends of the company as the receipts or assets and liabilities (as may be prescribed) in Victoria bear to the total

receipts or assets and liabilities. It is provided that shipowners whose principal place of business is outside the colony shall pay £5 for every £100 received for the carriage of Victorian passengers, goods, and mails. In the case of sales of property, where the principal is not a resident of Victoria, the taxable amount of his income derived from such sale or disposal of property is assessed at 5 per cent. of the total amount for which the property was sold or otherwise disposed of, unless it should be proved to the satisfaction of the Commissioner that the amount received was less than 5 per cent., when a corresponding reduction will be made. The exemptions include the income of the State, local authorities, savings banks, University of Melbourne and affiliated colleges, Working Men's College, schools of mines, technical schools, religious bodies, registered friendly societies, building societies, and trade unions; of societies and public bodies not carrying on business for purposes of gain to shareholders or members; of mutual life assurance companies whose head offices are in Australia; of insurance companies (other than life) taking out an annual license under the Stamps Act; and of mining companies, also such dividends derived from mining companies as may not be in excess of calls paid up during the year; and income derived by foreign investors from the stock of Government or local bodies.

Dividend Tax in Queensland.

There is no land tax in Queensland, and income tax is only collected on the dividends declared by public companies. The rate is 1s. per £ on dividends declared by all companies having their head office or chief place of business in Queensland, provided that when the operations of such a company extend beyond the colony duty shall only be payable on so much of the dividends as is proportionate to the average capital employed within the colony. In the case of companies which have not their head office in Queensland, and which are not companies carrying on insurance business only, the duty is payable on so much of the total dividends as is proportionate to the average amount of capital employed in the colony during the year as compared with the total average capital of the company; and in the case of insurance companies duty is payable at the rate of 20s. for every £100 or part of £100 of gross premiums received. An exemption is allowed in the case of mining companies, the tax of 1s. per £ being payable only on dividends over and above those applied in repayment of the expenditure actually incurred by the company before the declaration of the first dividend in respect of labour or material employed in developing the mine, and in repayment of three-fourths of the cost of machinery erected for the raising of ores and other materials from the mine.

Land and Income Taxation in South Australia.

In South Australia the land tax is calculated on the unimproved value, the rate being ½d. in the £, with an additional tax of ½d.

on every £ in excess of £5,000. The amount of tax payable by an absentee, who is defined as a person who has been absent from or resident out of the colony for two years, is increased by 20 per cent. The exemptions to the land tax comprise Crown lands which are not subject to any agreement for sale or right of purchase, park lands, public roads, public cemeteries, and other public reserves, and land used solely for religious or charitable purposes, or used by any institute under the provisions of the Institute Act of 1874. It is provided that an assessment shall be made every three years, and that the distribution of the tax shall be made according to the proprietary interest held in the land. It is further provided that if the payment of the tax has been in arrear for a period of two years the Commissioner may, after giving another year's notice of his intention, let the land from year to year, and after deducting from the rents the amount of tax, with costs and expenses, hold the balance for the benefit of the owner; or he may even go so far as to petition the Supreme Court for permission to sell so much of the land as may be necessary for the payment of the tax and costs and expenses.

The income tax varies according to the source whence the income is derived. On incomes derived from personal exertion the rate imposed is 4½d. in the £ up to and including £800, and 6d. for every £ in excess of that sum, with double these rates on incomes the produce of property. The sum exempted from taxation is £150, if the income does not exceed £300 per annum; but no exemption is allowed in the case of an income in excess of the sum named. The exemptions from taxation comprise the incomes of municipal corporations and district councils; of companies, public bodies, and societies not carrying on business for purposes of gain to be divided amongst shareholders or members; and of friendly societies. Land and buildings occupied by the owner for residential purposes are taken as returning an income of 5 per cent. on the capital value, and the income of a company is declared to be the produce of property for taxation purposes.

Dividend and Companies Tax in Western Australia.

Of all the colonies, Western Australia was the last to extend the system of direct taxation to incomes; but, like Queensland, the field of taxation was restricted to the income and dividends of companies. The Act authorising this taxation is known as the Companies Duty Act of 1899. The main object aimed at by Parliament in sanctioning this partial taxation of incomes was to secure to the colony some portion of the golden harvest of the mining fields; and although the Act has not been sufficiently long in operation to enable a full estimate of its effects to be obtained, it is quite plain that the fears of its opponents—that it would scare capital away from the colony—have not been, and are not likely to be, realised. It was originally proposed that the charges should be—5 per cent. on dividends, whether called by the name of dividends, bonuses, profits, interest, or any other term; but as

to insurance companies, 1 per cent. only. Ultimately, life insurance companies were exempted from the operation of the Act, and fire and marine insurance companies were required to pay on their net premiums. All other incorporated companies and banks, were to pay on their declared profits, and local companies on their dividends. In view of the Act being regarded as legislation of an experimental character, it was thought desirable to limit its existence to a period of about three years. Provision was therefore made that the measure should only remain in force until the 31st December, 1902.

Land and Income Taxation in Tasmania.

The land tax payable in Tasmania is at the rate of ½d. in the £ on the total capital value of land, with a deduction of ⅙d. in the £ on account of mortgages. The exemptions comprise land the property of a municipal corporation or other local authority, or of a registered friendly society; the site of a State school under the Education Department; of a public library or museum; of the Tasmanian Museum; of a hospital or benevolent asylum or other building used solely for charitable or religious purposes, or land vested in trust for public purposes; public roads; cemeteries which are not owned by joint-stock or public companies; and public reserves, gardens, and recreation grounds. Crown lands held on lease are also exempted from taxation, but if they have been purchased on credit the occupier is required to pay tax, provided one-half of the price has been paid or has become due. The owner of the land is looked to directly for the amount of the tax, unless he resides out of the colony or cannot be found, in which case the occupier becomes responsible, but is allowed to deduct the sum from the amount of his rent. The Commissioner has power to let the land if the tax remains unpaid six months after it has become due, or, with the approval of a Judge of the Supreme Court, to sell it if the tax has remained unpaid for two years; and it is provided that the balance of the proceeds, after the amount of the tax, with costs and expenses, has been deducted, shall be handed over to the owner of the rented property or the original owner of the property which has been sold.

The Income Tax Act in force in the colony provides that 8d. per £ shall be payable on incomes derived from personal exertion, 1s. per £ on incomes the produce of property, and 1s. per £ on the profits of public companies. The chief exemptions are the revenues of municipal corporations and other local authorities; incomes of companies, societies, or public bodies or trusts not carrying on business with a view to a distribution of profits amongst their shareholders or members; the funds and incomes of registered friendly societies and trade unions; income accruing to foreign investors in Tasmanian Government stock; rents from land subject to land tax; incomes of banking and insurance companies which have not their head offices in the colony (and which are specially taxed); and incomes of persons who

have not been resident in the colony for at least twelve months. It is provided that persons deriving income from sources outside the colony shall not be taxed in respect of the same if income tax has been paid upon the money in the colony or country whence it has been derived. In the case of incomes derived from personal exertion, an exemption is made of all incomes not exceeding £150; on incomes exceeding £150 and not exceeding £400, the sum of £120 escapes taxation; but all incomes exceeding £400 in amount are taxed to the full extent. Where the income is the produce of property, incomes not exceeding £100 in amount are exempt from taxation; but only £80 is exempted when the income exceeds £100 and does not exceed £400; and no exemption is allowed when the income is in excess of £400 per annum. It is also provided that, when the income is derived from both sources, no tax shall be payable if the total amount does not exceed £150 and the part derived from property is less than £100; but when the income from the combined sources exceeds £150 in amount and is less than £400, a certain deduction is made, provided the part derived from property is less than £100, or the part derived from personal exertion is less than £150; the deduction must, however, be made in such a manner that the amount of tax payable shall not be less than if the whole of such income had been derived either from property or from personal exertion.

Land and Income Taxation in New Zealand.

In New Zealand the Land and Income Tax Assessment Act imposes a tax upon incomes and an ordinary tax upon land and mortgages, the amount of which it is provided shall be fixed annually by a Rating Act; and also an additional graduated tax upon the unimproved value of land, the rates of which are fixed by the Assessment Act. The rate of the ordinary tax upon land and mortgages at present stands at 1d. in the £ of capital value. It is provided that the owner of any land shall pay the tax on the actual value of his land, and also on the value of any mortgages which he may hold over other land, less the value of improvements, and of any mortgage which may be owing on his land. If, then, the net value does not exceed £1,500, an exemption of £500 is allowed, but for every £2 by which the net value exceeds the sum of £1,500 the exemption of £500 is reduced by £1, so that when the value reaches the sum of £2,500 there is no exemption at all. In the case of land owned and mortgages held by persons incapacitated by age, ill-health, or other cause from earning further income from business or employment, the exemption of £500 is raised to £2,000 if the annual income produced by the land and mortgages does not amount to a larger sum than £200. Mortgages are treated as land, and the holder is allowed the exemption of £500 from the ordinary tax.

The graduated land tax is imposed on all land possessing an unimproved value of £5,000 and upwards, an important difference between the two taxes being that the mortgagee escapes the graduated

tax, and no deduction is allowed to the mortgagor in consideration of any sum which may be advanced on the property. It is provided that on an unimproved value of £5,000 and under £10,000, $\frac{1}{8}$d. per £ shall be payable; on £10,000 and under £15,000, $\frac{1}{4}$d.; £15,000 and under £20,000, $\frac{3}{8}$d.; £20,000 and under £25,000, $\frac{1}{2}$d.; £25,000 and under £30,000, $\frac{5}{8}$d.; £30,000 and under £40,000, $\frac{3}{4}$d.; £40,000 and under £50,000, $\frac{7}{8}$d.; £50,000 and under £70,000, 1d.; £70,000 and under £90,000, $1\frac{1}{8}$d.; £90,000 and under £110,000, $1\frac{1}{4}$d.; £110,000 and under £130,000, $1\frac{3}{8}$d.; £130,000 and under £150,000, $1\frac{1}{2}$d.; £150,000 and under £170,000, $1\frac{5}{8}$d.; £170,000 and under £190,000, $1\frac{3}{4}$d.; £190,000 and under £210,000, $1\frac{7}{8}$d.; and £210,000 and over, 2d. per £.; and it is further provided that an absentee, who is declared to be a person who has been absent from or resident out of the colony for a period of three years or more, shall pay a graduated tax of 20 per cent. additional to the schedule rates.

It is provided that returns of land and mortgages shall be made biennially. Purchasers of Crown lands on credit are liable to taxation, and the owner of a leasehold interest in land is liable to taxation in respect of the value of such interest. The exemptions comprise Crown lands; lands vested in the Railway Commissioners and in local governing bodies; land used solely in connection with a place of worship or a place of residence for the clergy of any religious body, or in connection with public schools established under the Education Act of 1877, or with any other school not carried on exclusively for gain or profit, but the maximum area of land exempted for the purposes of any school carried on for profit is 15 acres; the site of a university or college, or school incorporated by any Act or Ordinance, or the site of a public library, athenæum, mechanics' institute, or school of mines; a public cemetery or burial-ground; the ground or place of meeting of any agricultural society, provided it be the property of such society; the place of meeting of a friendly society or Masonic lodge, or of a registered building society; land used for the purposes of public charitable institutions constituted under the Hospitals and Charitable Institutions Act, and of other charitable institutions not carried on for gain or profit; public gardens, domains, or recreation or other public reserves not occupied by a tenant, and all public roads and streets; land owned and occupied by Maoris, and not leased to or occupied by any person other than the Maori owner; and any public railway, including the land occupied and used as permanent way and for yards, stations, and sheds, and all buildings used for the purposes of railway traffic only. Further exemptions comprise all land owned and mortgages held by any friendly society within the meaning of the Act; all land owned and mortgages held by any savings bank constituted under the Savings Bank Act of 1858; all land owned and mortgages held by the Commissioners of Sinking Funds under the Public Debts Sinking Funds Act of 1868, or by the trustees of any local authority whose revenues are exempt from taxation; and all mortgages held by or on behalf of any charitable institution.

Still another exemption is provided for, namely, all land owned and mortgages held by or on behalf of any religious body, the proceeds of which land and mortgages are devoted to the support of aged or infirm ministers, or of widows or orphan children of ministers. It is also declared that native land occupied by any other person than the Maori owner shall be subject to one-half of the ordinary land tax in respect of the Maori landowner's interest therein, while being exempt from the graduated tax, and that all mortgages held by or in trust for Maoris shall be liable to the payment of ordinary land tax. Mortgages held by banking companies are reached by the income tax; and land owned and mortgages held by any registered building society are exempted from taxation, the profits derived by members being subject to income tax. In the event of land being undervalued, the Commissioner may give notice to the owner, within twelve months of the signing of the assessment roll, that he must increase the value of the land to the sum placed upon it by the taxation authorities. If the owner is not willing to increase the value to the sum notified by the Commissioner, he may appeal to the Resident Magistrate to assess the value; but should he neither adopt this course nor consent to the Commissioner's valuation within thirty days, the Commissioner may recommend that the Government shall purchase the land at the returned value plus 10 per cent. On the other hand, if the owner is not satisfied with the value at which the land has been assessed, whether by the Board of Review or not, he may call upon the Commissioner to reduce the valuation to a certain sum or to purchase the land at this price.

The income tax is payable upon income derived from employment and from business, including investments other than those in mortgages of land, upon which ordinary land tax is levied. An exemption of £300 is allowed to every person domiciled in the colony, this concession being withheld from absentees; but no exemption is allowed to a public company. The rate of tax is 6d. in the £ on the first taxable £1,000, and 1s. on every additional £, except in the case of public companies, which pay 1s. per £ on the whole sum. The income of public companies is declared to be the amount of dividends earned, sums carried to reserve fund, and any other profits made or income derived by such companies. To this provision exception is made in the case of banking companies, insurance companies, shipping companies, and loan, building, and investment companies. It is provided that every banking company shall be assessed for income tax at the rate of 7s. 6d. per £100 of the average of the total liabilities and assets for the four quarters of the preceding year. The shareholders of loan, building, and investment companies are personally taxed upon the amount of income derived from such societies. The regulations declare that a person or company engaged in business as the owner or charterer of shipping shall be assessed upon the income derived from such business carried on in New Zealand and with places beyond the colony; and that when the head office of a person or company engaged in such business is

outside the colony the agent shall be liable to the payment of income tax of 5 per cent. of the receipts from the carriage of passengers, goods, and live stock shipped at New Zealand ports. It is also provided by these regulations that the income of every insurance company shall be taken as the income derived from business carried on in the colony, and from investments within the colony other than those in land and in mortgages of land. The exemptions to the income tax comprise the revenues of any county council, borough council, town board, road board, harbour board, public university, public school, education board, school commissioners, licensing committee, and every other local authority receiving revenue of any kind for the purposes of or in relation to local self-government; the income of friendly societies and building societies, and of all public bodies and societies not carrying on business for purposes of gain to be divided amongst the shareholders or members; and income derived by the owner or occupier from any land on which land tax is payable, and from mortgages of such land. The income of any savings bank constituted under the Savings Bank Act of 1858, and the income of any public charitable institution, are also exempted. Also, when a person occupies for purposes of business or employment land on which he pays land tax, he is allowed to deduct from his income a sum equal to 5 per cent. on the amount on which he is liable to pay land tax. It is imperative that a person who does not reside permanently in the colony, and who offers or exposes goods for sale or disposition by sample or otherwise, shall take out an annual license, the fee for which is fixed by regulation at £50.

Revenue from Direct Taxation.

The following table shows the amount of revenue received from the various sources of direct taxation during the year 1899–1900:—

State.	Stamp Duties.		Land Tax.	Income Tax.	Dividend Tax.	Total.
	Probate.	Other.				
	£	£	£	£	£	£
New South Wales	99,374	209,742	286,227	166,051	.....	761,394
Victoria	126,478	206,156	108,222	215,071	.....	655,927
Queensland	245,426		.....	.....	†73,604	319,030
South Australia	33,891	31,060	78,406	94,475	.....	237,832
Western Australia	3,056	36,866	.....	.....	55,015	94,937
Tasmania	13,267	17,322	15,106	21,219	‡2,254	69,168
Commonwealth	1,022,638		487,961	496,816	130,873	2,138,288
New Zealand	82,135	198,676	*293,735	128,721	.....	703,267
Australasia	1,303,449		781,696	625,537	130,873	2,841,555

* Includes £108 on account of Property Tax. † Includes £7,127 from Totalisator Tax.
‡ From Companies' Tax.

Land Revenue.

The practice of treating as ordinary revenue money derived from the sale and occupation of Crown lands obtains in all the colonies, and the money so raised forms one of the largest items of their income. The propriety of so doing is open to grave doubt, but the argument used in its justification is that the sums so obtained have enabled the Government either to construct works, which both enhance the value of the remaining public lands and facilitate settlement, or to endow municipalities, and thus enable them to carry out local works. The revenue from land sales is declining year by year, both absolutely and as compared with population. In New South Wales and South Australia the falling-off has been most noticeable; in the former colony the revenue from this source is now some £1,204,000 less than was the case in 1881, while in South Australia the revenue from land sales is under £36,000.

Adopting the division of land revenue into receipts from sales and receipts from occupation, the following table shows the income for 1881:—

State.	Total Land Revenue, 1881.			Land Revenue per head.		
	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	2,483,338	337,651	2,820,989	3 4 11	0 8 10	3 13 9
Victoria	701,276	135,194	836,470	0 16 4	0 3 2	0 19 6
Queensland	435,664	186,893	622,557	2 0 6	0 17 5	2 17 11
South Australia	651,914	97,042	748,956	2 8 9	0 7 3	2 16 0
Western Australia	5,750	34,695	40,445	0 3 11	1 3 6	1 7 5
Tasmania	37,269	39,487	76,756	0 6 5	0 6 9	0 13 2
Commonwealth	4,315,211	830,962	5,146,173	1 17 10	0 7 3	2 5 1
New Zealand	376,461	174,479	550,940	0 15 4	0 7 1	1 2 5
Australasia	4,691,672	1,005,441	5,697,113	1 14 2	0 7 4	2 1 6

Compared with 1881, the land revenue for 1899–1900 shows a large decline, amounting to £1,685,885 for the colonies included in the Commonwealth, or to £1,974,596 for the whole of Australasia. The falling-off is found entirely in the amount of revenue from sales, that derived from rents having largely increased. However, general remarks applicable to all the colonies can scarcely be made. New South Wales obtained £2,483,338 from land sales in 1881, out of a total of £4,691,672 for all the colonies, or more than one-half; while from occupation its revenue was £337,651 out of £1,005,441, or little more than one-third. In 1899–1900 the revenue of the colony from sales amounted to

£1,278,867—still a large amount, but £1,204,471 short of the receipts of 1881. In regard to occupation, a different condition of things is disclosed. The receipts in New South Wales during 1899–1900 totalled £829,566, or an increase of £491,915 as compared with 1881, and amounting to 52 per cent. of the total of the colonies comprising the Commonwealth, or to 47 per cent. of the total for Australasia. The following are the figures for 1899–1900 :—

State.	Total Land Revenue, 1900.			Land Revenue per head.		
	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	1,278,867	829,566	2,108,433	0 18 10	0 12 3	1 11 1
Victoria	279,510	95,757	375,267	0 4 10	0 1 7	0 6 5
Queensland	202,281	416,462	618,743	0 8 5	0 17 3	1 5 8
South Australia	34,694	122,422	157,116	0 1 11	0 6 7	0 8 6
Western Australia	38,574	90,952	129,526	0 4 6	0 10 8	0 15 2
Tasmania	35,454	35,749	71,203	0 3 11	0 4 0	0 7 11
Commonwealth	1,869,380	1,590,908	3,460,288	0 10 0	0 8 7	0 18 7
New Zealand	90,831	171,398	262,229	0 2 5	0 4 6	0 6 11
Australasia	1,960,211	1,762,306	3,722,517	0 8 9	0 7 11	0 16 8

In all the colonies, New South Wales and Victoria excepted, a general sinking fund is established to assist in the redemption of public loans on maturity, and in New South Wales special sinking funds have been inaugurated in connection with portions of the local funded stocks. The desirability of establishing a general sinking fund is on all sides admitted, and a portion of the proceeds of lands sales could with advantage be set apart from the general revenue and devoted to this purpose. Victoria deals with a portion of the proceeds from the sale of Crown lands apart from the general revenue, and in 1891 a sum of £578,740 derived from that source had been placed to the credit of the Railway Construction Account; while since that year various sums have been appropriated on account of the "Land Sales by Auction Fund" for expenditure on public works.

Heads of Expenditure.

The amount disbursed by the Government of New South Wales is far larger than that expended by any other colony of the group; in the last financial year it exceeded the expenditure of Victoria by £2,492,457, was nearly twice as great as that of New Zealand, and was only £281,000 less than the united expenditure of Queensland, South Australia, and Western Australia. This is chiefly owing to the large extent of settled

territory in the colony, and the system of centralisation already referred to. Below will be found a statement of the expenditure of each colony during the financial year 1899–1900 :—

State.	Railways and Tramways.	Posts and Telegraphs.	Public Instruction.	Interest and charges on Public Debt.	All other Services.	Total Expenditure.
	£	£	£	£	£	£
New South Wales	2,049,220	754,527	726,498	2,594,406	3,686,751	9,811,402
Victoria	1,824,460	524,693	563,129	1,877,701	2,528,962	7,318,945
Queensland	947,191	361,377	251,040	1,339,149	1,641,661	4,540,418
South Australia	691,954	215,904	149,561	1,023,842	855,358	2,936,619
Western Australia.....	884,861	239,309	69,979	439,825	981,701	2,615,675
Tasmania	152,775	78,095	47,984	316,815	275,785	871,454
Commonwealth	6,550,461	2,173,905	1,808,191	7,591,738	9,970,218	28,094,513
New Zealand	1,039,412	388,582	472,653	1,749,394	1,490,087	5,140,128
Australasia	7,589,873	2,562,487	2,280,844	9,341,132	11,460,305	33,234,641

It will be seen from the foregoing statement that for the colonies of the Commonwealth 23·3 per cent. of the whole expenditure is for working the railways of the colonies—a service not undertaken by the Government in the United Kingdom and the United States. Posts and telegraphs absorb 7·7 per cent., while public instruction accounts for 6·4 per cent., and interest on the public debt, 27·02 per cent. For the whole of Australasia the corresponding percentages are :—Railways, 22·8 ; posts and telegraphs, 7·6 ; public instruction, 6·8 ; and interest on the public debt, 28·11 per cent.

Adopting the classification of expenditure used in the preceding table, the amounts per inhabitant of each province are given below. It may be here mentioned that in New South Wales, and to some extent in South Australia and Western Australia, the tramways are the property of the State, and are under the same management as the railways, with which they are included in the various statements in this sub-chapter relating to revenue and expenditure :—

State.	Railways and Tramways.	Posts and Telegraphs.	Public Instruction.	Interest and charges on Public Debt.	All other Services.	Total Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales..	1 10 3	0 11 1	0 10 9	1 18 3	2 14 4	7 4 8
Victoria	1 11 5	0 9 0	0 9 8	1 12 3	2 3 6	6 5 10
Queensland	1 19 3	0 15 0	0 10 5	2 15 6	3 8 1	9 8 3
South Australia.....	1 17 4	0 11 8	0 8 1	2 15 3	2 6 2	7 18 6
Western Australia..	5 3 6	1 8 0	0 8 2	2 11 5	5 14 9	15 5 10
Tasmania	0 17 0	0 8 8	0 5 4	1 15 3	1 10 9	4 17 0
Commonwealth	1 15 2	0 11 8	0 9 9	2 0 9	2 13 7	7 10 11
New Zealand.....	1 7 7	0 10 4	0 12 7	2 6 5	1 19 7	6 16 6
Australasia.....	1 13 11	0 11 6	0 10 2	2 1 9	2 11 2	7 8 6

The most remarkable feature in the general expenditure of the Australasian colonies is the largeness of the amount required to pay interest and charges on the public debt, both in regard to the rate per head and the proportion of total revenue thus hypothecated. The proportion for the colonies of the Commonwealth is 27·02 per cent. of the total expenditure, or £2 0s. 9d. per head of population, and for the whole of Australasia 28·11 per cent., or £2 1s. 9d. per head. The actual expenditure for each colony during 1899–1900 was as shown below. The amounts given are actual payments made during the financial year, and do not represent the interest liabilities of that period, the amounts of which will be found on page 800 :—

State.	Interest and Charges on Public Debt.		
	Total.	Per head of Population.	Proportion of Total Expenditure.
	£	£ s. d.	per cent.
New South Wales	2,594,406	1 18 3	26·44
Victoria	1,877,701	1 12 3	25·66
Queensland	1,339,149	2 15 6	29·49
South Australia	1,023,842	2 15 3	34·86
Western Australia	439,825	2 11 5	16·81
Tasmania	316,815	1 15 3	36·35
Commonwealth	7,591,738	2 0 9	27·02
New Zealand	1,749,394	2 6 5	34·03
Australasia	9,341,132	2 1 9	28·11

A casual glance at the figures quoted will lend colour to the suggestion sometimes hazarded that the colonies are too rapidly mortgaging their resources, and that the expense of the public debt will prove a greater burthen than can easily be borne. However true this may be as far as any individual colony is concerned, it is certainly erroneous as regards the whole of Australasia. Out of the sum of £7,591,738 required to pay interest and charges on the public debt by the colonies of the Commonwealth during 1899–1900, £4,082,447 was directly recouped by the net revenue from public railways, while water supply and sewerage yielded a further sum of £457,440, making a total of £4,539,887. For the whole of Australasia, the sum required to pay interest and charges on the public debt was £9,341,132, but of this £5,122,862 was directly recouped, viz., £4,664,648 by the net revenue from railways, and £458,214 by water supply and sewerage. Besides this, there is a large indirect revenue obtained by each of the colonies from the opening-up of its public lands, and from the construction of breakwaters, wharves, bridges, and other works of public utility. But even these advantages

might have been bought at too high a price if production had not correspondingly advanced. Fortunately such has been the case, as will be seen from the chapters in this volume which deal with the leading items of Australasian production.

Adjusted Revenue and Expenditure.

The form in which the public accounts of the colonies are presented has led to a great deal of misconception regarding the actual requirements of the various Governments for public purposes. Nor has it been possible to do other than follow that form in the foregoing pages, as otherwise the figures quoted would differ from the various Treasury statements, and add another element of confusion; nevertheless, it would be well before closing the remarks on this branch of public finance to make a separation of the items of revenue and expenditure according to the principles which should govern the presentation of the public accounts. This is effected by treating the services which are generally regarded as outside the functions of the central Government, namely, railways and tramways, and water supply and sewerage, as matters apart from the general receipts and expenditure, and only crediting the State with the surplus from, or debiting it with the cost of these services, after deducting working expenses and making allowance for interest on the invested capital. Posts and telegraphs have not been excluded, as they are matters of governmental administration in nearly all countries. The adjusted revenue for the year 1899–1900 will be found below :—

State.	Revenue, excluding Services.*	Net Revenue from Services.*	Total adjusted Revenue.	Per head of Population.
	£	£	£	£ s. d.
New South Wales	6,044,517	.....	6,044,517	4 9 1
Victoria	4,288,170	.....	4,288,170	3 13 9
Queensland	3,164,374	.....	3,164,374	6 11 2
South Australia	1,572,457	.....	1,572,457	4 4 9
Western Australia	1,604,712	117,469	1,722,181	10 1 5
Tasmania	751,409	.....	751,409	4 3 7
Commonwealth	17,425,639	117,469	17,543,108	4 14 3
New Zealand	4,072,629	.....	4,072,629	5 8 2
Australasia	21,498,268	117,469	21,615,737	4 16 6

* Railways, tramways, water supply and sewerage.

It will be seen that the only colony which obtained a revenue from its services during 1899–1900, after working expenses and interest on capital had been allowed for, was Western Australia—a position due to the excellent results of its railway management. The next table shows the adjusted expenditure:—

State.	Expenditure, excluding Services.*	Net Expenditure on Services.*	Total adjusted Expenditure.	Per head of Population.
	£	£	£	£ s. d.
New South Wales	5,830,776	51,407	5,882,183	4 6 9
Victoria	3,748,614	407,825	4,156,439	3 11 6
Queensland	2,766,715	349,870	3,116,585	6 9 2
South Australia	1,527,588	128,159	1,655,747	4 9 4
Western Australia	1,462,460	.....	1,462,460	8 11 0
Tasmania	575,692	103,201	678,893	3 15 7
Commonwealth	15,911,845	1,040,462	16,952,307	4 11 1
New Zealand	3,447,793	65,346	3,513,139	4 13 4
Australasia	19,359,638	1,105,808	20,465,446	4 11 5

* Railways, tramways, water supply and sewerage.

The figures just given show that the actual cost of government is materially less in the colonies than would appear from the ordinary statement of revenue and expenditure.

Position of Revenue Accounts.

The following table has been compiled with the view of showing the position of the Revenue Account of each colony at the close of the last financial year. It will be seen that four of the colonies have large overdrafts, partly cash and partly in the form of Treasury bills, and that to establish the necessary equilibrium between income and outgo a restricted expenditure by future Administrations will be absolutely necessary. For Tasmania the figures refer to the end of the year 1899; for New Zealand, to the 31st March, 1900; and for the other five colonies, to the 30th June, 1900. The figures given in the last column of the table represent the total debit balances at these dates. It is very necessary that this fact should be borne in mind, as it often happens that the official statements of the colonies show only the

cash overdraft, the amount represented by outstanding Treasury bills being omitted from consideration :—

State.	Cr. Balance.	Dr. Balance.		
		Overdraft liquidated by Treasury Bills.	Cash Overdraft.	Total Dr. Balance.
	£	£	£	£
New South Wales	17,742	2,027,584	.....	2,027,584
Victoria	.....	200,000	1,830,386	2,030,386
Queensland	47,789	1,000	.....	1,000
South Australia	.....	.....	732,784	732,784
Western Australia	12,372	.....	.....	.....
Tasmania	.....	.....	183,805	183,805
Commonwealth	77,903	2,228,584	2,746,975	4,975,559
New Zealand	818,245	.....	.....	.....
Australasia	896,148	2,228,584	2,746,975	4,975,559

It will be seen that for the colony of New South Wales the table shows an overdraft of £2,027,584 which has been liquidated by Treasury bills, while at the same time the revenue account had a credit balance of £17,742 at the close of the financial year. This is explained by the fact that the Government have decided not to apply this credit balance to the redemption of any part of the outstanding bills, which were issued to cover deficiencies of previous years, but to carry the balance to the next year. This amount of £17,742 included £5,137, held on account of deficiency to the 30th June, 1895, and previous years, for redemption of Treasury bills to cover the deficiency. In reference to the South Australian cash overdraft of £732,784, it should be pointed out that this is obtained by a credit balance of £5,506 for the colony proper, and a debit balance of £738,290 for the Northern Territory. Also, in the case of Tasmania, it is necessary to mention that the cash overdraft of £183,805 shown above was covered by Treasury bills and local inscribed stock to the amount of £141,727, which had been issued and were outstanding at the end of the year.

The condition of the revenue accounts of New South Wales, Victoria, and New Zealand needs further explanation. In New South Wales land was resumed in 1889 for the purpose of facilitating certain improvements in connection with a street facing the General Post-office, Sydney, and it was determined that the sum paid for resumption should not be treated as a matter of ordinary expenditure, but be held in suspense pending the sale of the land resumed, or so much of it as was not needed for the formation of the Post-office street. Another resumption of land by the Government of New South Wales was authorised by the Centenary

Celebration Act of 1887, which provided for the acquisition of a large area of land, close to Sydney, for the formation of a public park to commemorate the centenary of the colony. Of the area so acquired, 640 acres were to be set aside for the park, and the remainder was to be sold, and the proceeds placed against the expenditure. So far no sales have been effected, and in 1894 the payments on account of the formation of the park were transferred from the Consolidated Revenue Fund Account to a special Suspense Account. On the 30th June, 1900, the debit balance of the Centennial Park Account was £228,417, and of the General Post-office New Street Resumption Account, £389,081, neither of which amounts is included in the above table. Legislation has been passed with a view to the issue of Treasury bills covering the liability under the Suspense Accounts referred to; the replacing of £150,000 to the credit of the sinking fund for Railway Loan, 53 Vic. No. 24, which was applied to the redemption of the balance of Railway Loan, 31 Vic. No. 11; to meet deficiencies in the Consolidated Revenue to 30th June, 1899, caused by the London transactions being brought to 30th June instead of 31st March as hitherto, and to meet the balance of extraordinary expenditure on account of military contingents to South Africa, and in connection with the bubonic plague. The authority is for the issue of Treasury bills to the amount of £930,965, and will cover all deficiencies to 30th June, 1900. Provision is made that on the 31st December, 1901, and on the same day in each year thereafter, until all the payments provided for have been made, the sum of £250,000 is to be paid from the Consolidated Revenue Fund to the credit of the respective accounts mentioned. Such annual sums are in the first place to be paid to the credit of a special Trust Account. In addition to the annual sum of £250,000, the net proceeds of the sales of the unsold portions of the land resumed under the General Post Office (Approaches Improvement) Act of 1889, and the net proceeds of the sale of the unsold portions of the land referred to in the Centenary Celebration Act of 1887 (Centennial Park), are to be paid to the credit of the account. The moneys at credit of such account are to be applied to the purpose of reducing the Treasury bills issued under the contemplated legislation, and where all such bills have been redeemed the account is to be closed. The appropriation of £250,000 is, however, to continue to redeem bills issued under the Deficiency Act of 1889, and on the redemption of these bills, the same annual appropriation is to be applied to redeem bills issued under the Deficiency Act of 1895. When this has been effected the appropriation is to lapse. The annual appropriation of £150,000 under the Deficiency Act of 1889 continues, so that the total annual appropriation for the liquidation of the unfunded debt for revenue purposes will be £400,000.

In Victoria certain public works were undertaken on the understanding that the cost should be defrayed from the proceeds of the sale of certain lands specifically set apart for the purpose. These works have been constructed, but the sales have fallen short to the extent

of £400,481, and this sum has been placed to a Suspense Account, which is likewise excluded from the debit balance given above. In the credit balance of New Zealand, shown on page 794, allowance has been made for the transactions of several Suspense Accounts, viz., the State Forests Account, the Local Bodies Account, and the Deposits Account; but in order to place the revenue and expenditure of that colony on the same footing as those of the other provinces, the operations on the accounts referred to have not been taken into consideration in the table on page 770.

The practice of issuing Treasury bills for the purpose of liquidating an overdraft, which is illustrated by the above table, obtains in all the colonies, the bills being in this respect somewhat like the exchequer bills issued by the British Treasury. This, however, is the only point of resemblance between the two. The British exchequer bills bear interest at a rate which is fixed from year to year, and at the end of every twelve months the holder has the option of retaining them or presenting them at the Treasury for payment. They are, therefore, readily saleable, and are used with great freedom in commercial transactions, for, as will be seen, they combine the two advantages of ready money and money bearing interest. The Treasury bills of these colonies, on the other hand, are only payable at the Treasury on the expiry of the period for which they are issued, and they carry interest at a fixed rate during the whole term of currency; consequently they are not used to any extent in commerce. The nearest approach to the British system seems to prevail in New Zealand, where Treasury bills to the amount of £700,000 were outstanding at the close of the financial year, but are not included in the public debt. With the exception of these New Zealand bills, Treasury bills are regarded as unfunded or floating debt, and until wiped off form part of the public debt. The local inscribed stock issued by Tasmania is similarly considered as unfunded debt.

Trust Funds.

It may be pointed out here that all the Governments in Australasia hold sums in trust, either directly or indirectly. In some instances these sums are considerable, and are found extremely useful in adjusting the finances, forming a strong reserve which a Government is able to use in tiding over temporary difficulties. It is, however, very questionable whether the existence of a large balance, out of which a necessitous Treasurer can make advances to an overdrawn Revenue or Loans Account, is desirable. In past years it has led to much extravagance that a Treasurer forced to rely on the legitimate revenue of the country would have been compelled to avoid. Several colonies have seen this, and in New Zealand and South Australia public trustees have been appointed to control Trust Funds in the hands of the Government; but in the other colonies these funds are directly subject to the Treasury. The

following are the balances of the Trust Funds at the close of the financial year 1899–1900 :—

	£
New South Wales	10,103,940
Victoria	8,232,499
Queensland	3,638,600
South Australia	449,275
Western Australia	1,802,142
Tasmania	439,786
Commonwealth	24,666,242
New Zealand	2,192,594
Australasia	26,858,836

Growth of Public Debt.

The practice of raising money for State purposes by means of public loans was begun in 1842, when New South Wales issued debentures redeemable in two years and bearing interest at the rate of 8 per cent. per annum. The sum raised—£45,900—was devoted to immigration purposes. This, as well as the succeeding loans, nine in number, raised prior to 1855, was obtained locally; in the year named, however, New South Wales placed on the London market the first instalment of a 5 per cent. loan for £683,300, which was the first external loan raised, and may be rightly said to mark the commencement of the present Australasian indebtedness.

So far as most of the colonies are concerned, their public debts date from about the time of their assuming the control of their own affairs; but Western Australia, which obtained responsible government in 1890, incurred liabilities in London as far back as 1872. In the case of that colony, however, the granting of Parliamentary government was unduly delayed. The following table is interesting as showing the liabilities of each of the provinces at the date of its taking charge of its own affairs:—

State.	Date of obtaining Responsible Government.	Amount of Debt Liability at that date.
		£
New South Wales	1855	1,366,770
Victoria	1855	480,000
Queensland	1859	Nil
South Australia	1856	294,900
Western Australia	1890	1,367,444
Tasmania	1855	Nil
New Zealand	1856	Nil

No feature of Australasian finance is so astonishing as the growth of the public indebtedness, and this fact has formed the gravamen of the many indictments which have been urged against the colonies during

recent years. The debts have undoubtedly grown at a much more rapid pace than the population; but as the colonies were in an entirely undeveloped state when public borrowing first came into favour, the more rapid growth of their indebtedness as compared with the population was in a sense the corollary of the position taken up by the various Governments—that the State should reserve to itself the construction of railways and similar undertakings which in other countries are prosecuted by private enterprise. Even with this explanation, however, the figures in the following statement are sufficiently striking:—

State.	1861.	1871.	1881.	1891.	1899-1900.
	£	£	£	£	£
New South Wales	4,017,630	10,614,330	16,924,019	52,950,733	65,332,993
Victoria	6,345,060	11,994,800	22,426,502	43,638,897	49,324,885
Queensland	70,000	4,047,850	13,245,150	29,457,134	34,349,414
South Australia ...	866,500	2,167,700	11,196,800	20,347,125	26,131,780
Western Australia	1,750	Nil	511,000	1,613,594	11,674,640
Tasmania	Nil	1,315,200	2,003,000	7,110,290	8,413,694
Commonwealth .	11,300,940	30,139,880	66,306,471	155,117,773	195,227,406
New Zealand	600,761	8,900,991	29,659,111	38,844,914	47,874,452
Australasia	11,901,701	39,040,871	95,965,582	193,962,687	243,101,858

The amounts for the year 1899–1900 represent both funded and unfunded debt. In round figures the increase for the colonies of the Commonwealth from 1861 to 1871 was 19 millions; from 1871 to 1881, 36 millions; from 1881 to 1891, 89 millions; and from 1891 to 1900, 40 millions; or for the whole of Australasia, from 1861 to 1871, 27 millions; from 1871 to 1881, 57 millions; from 1881 to 1891, 98 millions; and from 1891 to 1900, 49 millions. It must be pointed out that the figures in the last column show the public indebtedness as represented by outstanding debentures or stock; but the real sum is less by the amount of sinking funds in the case of all the colonies except Victoria, viz., New South Wales, £266,970; Queensland, £13,715; South Australia, £30,318; Western Australia, £377,161; Tasmania, £159,603; and New Zealand, £944,375. In New South Wales, sinking funds have been established in connection with some of the recent loans for the purpose of extinguishing portions of the expenditure on works of an unproductive character, the total amount accrued to 30th June, 1900, being £116,970. There are also annual payments on account of one of the railway loans and the Treasury bills in aid of revenue, but the instalments in the latter case are deducted annually, and the net indebtedness shown in the statement of the public debt, while for the redemption of the railway loan an amount of £150,000 was in hand at the same date.

The figures showing the total amount of the debt of each colony would be incomplete without corresponding information respecting the debt per head of population. In 1861 the public debt of the colonies included in the Commonwealth stood at £9 13s. 8d. per inhabitant; in 1871, at £17 13s. 11d.; in 1881, at £28 10s. 9d.; in 1891, at £47 14s. 1d.; while in 1900 it was £52 2s. 2d. The corresponding figures for Australasia were: in 1861, £9 8s.; in 1871, £19 16s. 4d.; in 1881, £34 0s. 2d.; in 1891, £49 18s. 4d.; and in 1900, £53 19s. 1d. For each colony the figures are as follow :—

State.	1861.	1871.	1881.	1891.	1899-1900.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	11 4 5	20 10 0	21 14 8	45 10 8	48 0 0
Victoria	11 14 3	16 0 11	25 9 7	37 14 4	42 4 6
Queensland	2 0 9	32 6 11	58 7 2	73 12 5	70 7 9
South Australia ...	6 16 8	11 13 7	39 2 1	62 9 11	70 15 0
Western Australia	0 2 3	Nil.	17 0 6	30 5 8	65 10 4
Tasmania	Nil.	12 18 5	16 16 10	46 11 10	46 3 1
Commonwealth .	9 13 8	17 13 11	28 10 9	47 14 1	52 2 2
New Zealand	6 1 4	33 6 9	59 4 2	61 5 3	63 2 5
Australasia	9 8 0	19 16 4	34 0 2	49 18 4	53 19 1

Of the £195,227,406 which constituted the debt of the colonies of the Commonwealth in 1900, £188,453,095 represented funded debt raised either as debentures or as funded or inscribed stock, and £6,774,311 unfunded or floating debt. For the whole of Australasia, the total debt of £243,101,858 was divided into £236,327,547 of funded debt and £6,774,311 of unfunded debt. The local inscribed stock raised by Tasmania is included in the unfunded debt. The particulars for each colony will be found below :—

State.	Date.	Debenture Bonds.	Inscribed and Funded Stock.	Treasury Bills.		Total.
				For Works.	In aid of Revenue.	
		£	£	£	£	£
New South Wales..	30 June, 1900	10,109,350	51,692,059	*1,504,000	2,027,584	65,332,993
Victoria	30 June, 1900	19,266,795	28,758,090	1,050,000	250,000	49,324,885
Queensland	30 June, 1900	12,284,380	22,064,034	.....	1,000	34,349,414
South Australia ..	30 June, 1900	9,485,100	16,646,680	.....	.....	26,131,780
Western Australia..	30 June, 1900	352,500	9,522,140	1,800,000	.....	11,674,640
Tasmania	31 Dec., 1899	3,264,720	5,007,247	.....	141,727	8,413,694
Commonwealth..	.....	54,762,845	133,690,250	4,354,000	2,420,311	195,227,406
New Zealand	31 Mar., 1900	6,265,686	41,608,766	.....	.....	47,874,452
Australasia	.....	61,028,531	175,299,016	4,354,000	2,420,311	243,101,858

* £4,000 overdue.

The relative burthen of the public debt of the various colonies is not to be determined only by comparing the gross amounts with the population, for the rate of interest payable must also be taken into consideration. Thus the general average interest payable by New South Wales is 3·62 per cent., while South Australia pays 3·79 per cent., so that a debt of £100 in the former is not more burthensome than £95 10s. 5d. in the latter colony. A more exact basis of comparison is obtained by taking the interest liability, which is shown below. The interest given is on the supposition that the debt is outstanding for the whole of the year following the day on which the amounts are made up. The whole debt, funded and unfunded, has been included :—

State.	Average rate of Interest.			Amount of Interest.	
	Funded Debt.	Unfunded Debt.	Total.	Amount on Outstanding Liabilities.	Per Inhabitant.
	per cent.	per cent.	per cent.	£	£ s. d.
New South Wales	3·64	3·43	3·62	2,369,392	1 14 9
Victoria	3·83	3·73	3·83	1,887,355	1 12 3
Queensland	3·77	4·00	3·78	1,296,784	2 13 2
South Australia	3·79	.....	3·79	989,578	2 13 7
Western Australia	3·39	3·78	3·44	402,253	2 5 2
Tasmania	3·76	3·65	3·76	316,147	1 14 8
Commonwealth	3·72	3·58	3·72	7,261,509	1 18 9
New Zealand	3·79	.....	3·79	1,816,592	2 7 11
Australasia	3·74	3·58	3·73	9,078,101	2 0 4

In 1884 the nominal rate of interest on New South Wales loans was fixed at 3½ per cent., at which rate stock to the amount of £29,326,200 had been sold to June, 1900. This example was not followed by any of the other colonies until 1888, when Queensland successfully floated a loan of £2,520,000 at the reduced rate; and in 1889 Victoria, South Australia, Tasmania, and New Zealand, in the order named, were successful in issuing stock at a similar nominal rate. Through the pressure of the financial crisis, the nominal rate for those colonies which issued in 1893 was increased to 4 per cent. Early in the following year, however, South Australia and Tasmania again placed loans on the market at the lower rate. New Zealand, in May, 1895, was the first colony to issue a 3 per cent. loan—an example which was followed by New South Wales in October of the same year, and by all the colonies since that date. Tasmania, however, has so far only floated local inscribed stock at 3 per cent. Below will be found the amount of the total debt under each rate of interest. For Tasmania, the figures refer to the 31st December, 1899; for New Zealand, to

the 31st March, 1900; and for all the other colonies to the 30th June, 1900:—

Rate of Interest.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
				FUNDED DEBT.					
Per cent.	£	£	£	£	£	£	£	£	£
Nil.	1,300	....	....	....	....	....	1,300	720	2,020
6	92,000	....	....	666,200	32,500	127,100	917,800	56,000	973,800
5½	4,500	....	....	....	....	....	4,500	....	4,500
5	1,708,000	....	....	290,000	83,100	100	2,081,200	710,700	2,791,900
4½	3,700	5,000,000	....	....	77,800	....	5,081,500	52,900	5,134,400
4	21,065,440	26,310,795	21,384,300	16,302,400	3,010,930	4,136,820	92,210,685	31,365,602	123,576,287
3¾	....	....	....	....	....	....	.....	349,000	349,000
3½	29,326,200	12,000,000	10,489,634	3,363,000	820,310	3,527,632	59,526,776	9,483,720	69,010,496
3	9,600,269	4,714,090	2,474,480	5,510,180	5,850,000	480,315	28,629,334	5,855,310	34,485,144
Total	61,801,409	48,024,885	34,348,414	26,131,780	9,874,640	8,271,967	188,453,095	47,874,452	236,327,547
				UNFUNDED DEBT. *(Treasury Bills and Local Inscribed Stock.)*					
Nil.	4,000	....	....	....	....	....	4,000	....	4,000
4½	....	....	....	....	....	46,900	46,900	....	46,900
4	1,269,500	750,000	1,000	....	1,000,000	3,100	3,023,600	....	3,023,600
3½	500,000	250,000	....	....	800,000	36,120	1,586,120	....	1,586,120
3¼	....	300,000	....	....	....	....	300,000	....	300,000
3	1,758,084	....	....	....	....	55,607	1,813,691	....	1,813,691
Total	3,531,584	1,300,000	1,000	....	1,800,000	141,727	6,774,311	....	6,774,311
Total Debt	65,332,993	49,324,885	34,349,414	26,131,780	11,674,640	8,413,694	195,227,406	47,874,452	243,101,858

The treasury bills of New Zealand do not rightly form part of the public debt, and such of these as were outstanding have therefore been excluded from the foregoing statement.

REDEMPTION OF LOANS.

Loans are either redeemed or renewed. In the former case, the amount of the obligations of the State to its public creditors is reduced; in the latter case, the liability remains the same or is only slightly altered. Repayments, however, are chiefly effected under the head of renewals, the amount of loans redeemed from revenue—by sinking fund, annual drawings, or directly from the general account—being small. The principle of extinguishing public debt by the operation of sinking

funds or by annual drawings is not general in Australasia, and in the colonies in which it has been adopted the loans affected do not amount to a large sum. In the case of sinking funds the money is held until the date of redemption; but exactly the opposite course is followed where annual drawings are provided, for in such cases the Government retire a certain amount of their debentures yearly, and thus effect a gradual extinction of the loan. As already explained, all the colonies except Victoria have sinking funds in operation, the amounts to the credit of which will be found on page 798. The system of annual drawings has been adopted to a very limited extent only by New Zealand, New South Wales, and Western Australia; the only loan so issued by New South Wales has, however, been redeemed.

With the exception of one or two small amounts of perpetual or interminable stock, all the Australasian loans are redeemable at prescribed dates; hence the Governments frequently find themselves at the mercy of an adverse market when they are compelled to raise a loan to pay off stock falling due. Within the last few years, however, practical steps have been taken by Victoria, Queensland, South Australia, Western Australia, and Tasmania to avoid this disability, the Governments of those colonies, in their late issues, having reserved to themselves the option of redeeming at a minimum or a maximum date, or any intervening period, on giving the necessary six or twelve months' notice. Canada was the first of the British possessions to introduce this principle.

Dates of Maturity.

Australasian loans have been issued for fixed periods, and the amount maturing in each year is given in the following statement. No combined action is taken to regulate the raising of loans, each colony acting according to the exigencies of its Government, regardless of the financial condition of its neighbours. The placing of a loan on the London market, especially if it be for a large amount, generally results in an all round fall in the prices of Australasian stocks, and subsequent issues of other colonies are placed at a disadvantage if the market is approached before it has recovered its tone; in fact, the colonies have in this respect all the evils of disintegration and all the liabilities of federation, without any of the advantages which federation would give. The evil effects of this lack of consultation between the Australian Treasurers will be seen from the table on the opposite page. In one year only of the next fifty is there no loan to be renewed or to be paid off, and the amounts to be met range as high as £31,323,199. Happily, the amounts to be redeemed during the next decade are moderate, and the fact of heavy obligations requiring to be met in any remote year may prove of advantage, as it will simplify negotiations when the time is ripe for the conversion of Australasian loans into one consolidated stock. Only one colony—New Zealand—is at present systematically

working with this end in view, but so far it has treated the question from a provincial standpoint only. The principle of adopting a minimum and a maximum date for repayment has been so recently introduced that, in the table now given, no attempt has been made to show specially the amounts to which it is applicable, the period of redemption in each case being assumed to be the more remote date.

Due Dates.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
				FUNDED DEBT.					
Overdue..	£ 1,550	£	£	£	£	£	£ 1,550	£ 720	£ 2,270
1900	861,600	....	....	....	....	31,220	892,820	442,600	1,335,420
1901	420,900	3,000,000	....	67,300	32,500	278,300	3,799,000	....	3,799,000
1902	459,000	....	....	65,000	34,000	151,441	709,441	550,000	1,259,441
1903	1,003,700	....	....	65,000	31,500	68,515	1,168,715	15,000	1,183,715
1904	58,000	5,457,000	....	62,500	....	24,240	5,601,740	150,000	5,751,740
1905	903,800	....	....	72,500	17,600	173,886	1,167,786	557,800	1,725,586
1906	224,900	....	....	37,500	....	....	262,400	939,766	1,202,166
1907	....	4,000,000	....	1,037,500	....	....	5,037,500	1,000,000	6,037,500
1908	1,450,000	2,000,000	....	1,951,100	....	333,615	5,734,715	400,000	6,134,715
1909	1,799,500	....	....	3,122,700	....	40,000	4,962,200	451,000	5,413,200
1910	2,863,700	....	....	60,300	70,310	....	2,994,310	466,487	3,460,797
1911	....	....	....	68,300	....	1,000,000	1,068,300	....	1,068,300
1912	6,068,999	....	....	85,000	....	....	6,153,999	....	6,153,999
1913	....	4,000,000	1,466,500	46,300	....	546,650	6,059,450	496,300	6,555,750
1914	....	....	....	35,000	....	800,000	835,000	331,800	1,166,800
1915	....	....	11,728,800	35,000	....	....	11,763,800	3,800	11,767,600
1916	....	....	....	9,033,880	....	....	9,033,880	12,200	9,046,080
1917	....	....	....	3,546,200	....	....	3,546,200	....	3,546,200
1918	12,826,200	....	....	1,474,400	....	....	14,300,600	....	14,300,600
1919	220,050	4,000,000	....	26,000	....	....	4,246,050	....	4,246,050
1920	....	6,000,000	....	336,300	....	300,000	6,636,300	....	6,636,300
1921	....	....	....	....	....	....	.....	500,000	500,000
1922	....	63,000	....	....	....	....	63,000	....	63,000
1923	....	7,746,795	....	....	....	....	7,746,795	....	7,746,795
1924	16,698,065	....	12,973,834	1,651,300	....	....	31,323,199	....	31,323,199
1925	222,255	....	....	....	....	....	222,255	....	222,255
1926	....	7,107,000	....	....	....	67,600	7,174,600	....	7,174,600
1927	....	....	....	....	1,000,000	....	1,000,000	....	1,000,000
1929	....	....	....	200,000	....	....	200,000	29,150,302	29,350,302
1930	....	....	3,704,800	....	....	....	3,704,800	....	3,704,800
1931	....	....	....	....	1,876,000	....	1,876,000	....	1,876,000
1933	9,686,300	....	....	....	....	....	9,686,300	....	9,686,300
1934	....	....	....	....	975,830	....	975,830	....	975,830
1935	5,500,000	....	....	....	4,500,000	....	10,000,000	....	10,000,000
1936	....	....	....	332,900	1,100,000	....	1,432,900	....	1,432,900
1939	....	....	....	2,719,800	....	....	2,719,800	....	2,719,800
1940	....	....	....	....	....	4,456,500	4,456,500	6,161,167	10,617,667
1945	....	....	2,000,000	....	....	....	2,000,000	5,855,810	7,855,810
1947	....	....	1,724,480	....	....	....	1,724,480	....	1,724,480
1949	....	1,591,579	....	....	....	....	1,591,579	....	1,591,579
1950	....	....	750,000	....	....	....	750,000	....	750,000
Intermin-able..	532,890	....	....	....	....	....	532,890	....	532,890
Annual Drawings..	....	....	....	....	236,900	....	236,900	389,700	626,600
Undefined	....	3,059,511	....	....	....	....	3,059,511	....	3,059,511
Total	61,801,409	48,024,885	34,348,414	26,131,780	9,874,640	8,271,967	188,453,095	47,874,452	236,327,547

Due Dates.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
UNFUNDED DEBT. *(Treasury Bills and Local Inscribed Stock.)*									
Overdue..	4,000	....	....	....	....	....	4,000	....	4,000
1900	....	....	....	....	300,000	141,727	441,727	....	441,727
1901	....	775,000	....	....	1,500,000	....	2,275,000	....	2,275,000
1902	1,000,000	25,000	....	....	....	....	1,025,000	....	1,025,000
1903	....	275,000	1,000	....	....	....	276,000	....	276,000
1904	....	25,000	....	....	....	....	25,000	....	25,000
1905	500,000	25,000	....	....	....	....	525,000	....	525,000
1906	....	25,000	....	....	....	....	25,000	....	25,000
1907	....	25,000	....	....	....	....	25,000	....	25,000
1908	....	25,000	....	....	....	....	25,000	....	25,000
1909	....	25,000	....	....	....	....	25,000	....	25,000
1910	....	25,000	....	....	....	....	25,000	....	25,000
1911	....	25,000	....	....	....	....	25,000	....	25,000
1912	....	25,000	....	....	....	....	25,000	....	25,000
Annual Drawings...	2,027,584	....	....	....	....	....	2,027,584	....	2,027,584
Total	3,531,584	1,300,000	1,000	....	1,800,000	141,727	6,774,311	....	6,774,311
Total Debt	65,332,993	49,324,885	34,349,414	26,131,780	11,674,640	8,413,694	195,227,406	47,874,452	243,101,858

EXPENSES OF NEGOTIATION.

From 1855, when the first New South Wales loan was placed on the London market, until the present time, the Australasian colonies have obtained from the same source nearly the whole of the money which they have borrowed. In only three of the provinces—New South Wales, South Australia, and Tasmania—does the amount of the outstanding loans locally subscribed form more than 10 per cent. of the sum in which the colony stands indebted. In New South Wales, the total local borrowings only come to £10,031,493; in Victoria, to £4,669,306; in Queensland, £2,474,280; in South Australia, £2,932,680; in Western Australia, £953,310; in Tasmania, £933,444; and in New Zealand, £4,574,773, making altogether a sum of £21,994,513, or 11·27 per cent. of the total debt of the Commonwealth, and for the seven colonies a sum of £26,569,286, or 10·93 per cent. of the total debt of Australasia. This dependence on the English market was originally due to lack of local capital; but of late years, when such capital has been fairly abundant, the Governments have still turned to London, and, strange to say, have offered the London investor a higher rate than that at which they have been able to place the small loans raised locally.

The charges incidental to the floating of an inscribed stock loan in England are heavy. The chief expense is the stamp duty of 12s. 6d. per

cent. imposed by the British Government on inscribed stock, the other charges being for services rendered. New South Wales, Queensland, and New Zealand issue their stock through the Bank of England; the London and Westminster Bank acts for Victoria and Western Australia; South Australia issues its loans through its Agent-General in London; while in the case of Tasmania also the Agent-General is the channel through whom the loans are placed, but he has the assistance of the London and Westminster Bank.

The cost of negotiation by the Bank of England is ½ per cent. commission; and by the London and Westminster Bank, ¼ per cent. Brokerage costs ¼ per cent. In addition to these charges and the stamp duty referred to above, there has usually to be added 4d. or 5d. per £100 for incidental expenses. The charges annually made by the Bank of England for the inscription and management of stock and the payment of the half-yearly dividends were £600 per million for the first ten millions, £550 for the next five, and £500 per million for all subsequent amounts. But in 1895 these rates were reduced by £100 per million to the three colonies employing the Bank; while from May, 1899, all amounts raised through the agency of the Bank of England, on behalf of New South Wales, are charged £200 per million. The charges of the London and Westminster Bank were £500 per million for the first ten millions, £450 for a second like sum, and £400 per million for any subsequent amount to the end of 1897, when the Victorian Government arranged with the Bank to reduce its rates for inscription of stock to £250 per million, without regard to the total amount inscribed.

On the old form of debenture the stamp duty imposed is 2s. 6d. per cent., or £1,250 per million. The expenditure per £100 debentures or inscribed stock of those colonies for which information is obtainable is given in the subjoined table. The debenture loans shown are some of the last issued. It will be seen that the cost of floating inscribed stock loans is much greater than that under the debenture system, but the extra outlay is inappreciable when compared with the advantages gained :—

State.	Year of Negotiation.	Principal.		Expenses per £100 Debenture and Stock.	Class of Stock.
		Rate of Interest.	Amount.		
			£	£ s. d.	
New South Wales.....	1883	4	2,000,000	0 11 5	Debentures.
	1889	3½	3,500,000	1 7 10	Inscribed.
	1891	3½	4,500,000	1 7 9	do.
	1893	4	2,500,000	1 8 0	do.
	1894	3½	832,000	1 9 5	do.
	1895	3	4,000,000	1 7 10	do.
	1898	3	1,500,000	1 8 5	do.

State.	Year of Negotiation.	Principal.		Expenses per £100 Debenture and Stock.	Class of Stock.
		Rate of Interest.	Amount.		
			£	£ s. d.	
Victoria	1880	4½	2,000,000	0 17 9½	Debentures.
	1891	3½	3,000,000	1 2 9	Inscribed.
	1892	3½	2,000,000	1 3 0	do.
	1893	4	2,107,000	1 3 0	do.
	1899	3	1,600,000	1 2 11	do.
Queensland	1881	4	1,089,500	0 15 9	Debentures
	1890	3½	2,264,734	1 8 0	Inscribed.
	1891	3½	2,500,000	1 8 2	do.
	1893	3½	1,182,400	2 18 8	do.
	1895	3½	1,250,000	1 11 7	do.
	1896	3	1,500,000	.....	do.
South Australia	1883	4	1,438,500	0 9 0	Debentures
	1889	3½	1,317,800	0 19 1	Inscribed.
	1892	3½	932,300	1 1 2	do.
	1893	3½	125,000	.....	do.
	1894	3½	475,600	.....	do.
	1894	3½	200,000	.....	do.
	1896	3	839,503	1 2 5	do.
	1897	3	500,000	1 0 11	do.
	1899	3	1,500,000	2 4 5	do.
	1900	3	1,000,000	2 7 7	do.
Western Australia	1891	4	250,000	1 3 6	do.
	1892	4	400,000	1 3 7	do.
	1894	4	540,000	1 5 6	do.
	1895	3½	750,000	1 3 7	do.
	1896	3	750,000	1 3 8	do.
	1897	3	1,000,000	1 3 7	do.
	1898	3	1,000,000	1 3 11	do.
	1898	3	1,000,000	1 3 11	do.
	1900	3	1,000,000	.....	do.
Tasmania	1886	4	1,000,000	0 18 0	Debentures.
	1889	3½	1,000,000	1 3 6	Inscribed.
	1893	3½	600,000	1 3 5	do.
	1894	4	1,000,000	1 3 8	do.
	1895	3½	750,000	1 4 5	do.
New Zealand	1895	3	1,500,000	2 2 8	do.
	1899	3	1,000,000	.....	do.

Against several loans the expenses have not been stated, as the information has not been computed by the colony interested. The high rate of expenses on the 1893 Queensland loan is accounted for partly by the fact that the amount was underwritten at the rate of 1 per cent.

Quotations of Stock.

In another chapter the growth of Australasian indebtedness on private account has been traced over a period of about twenty-nine years, and it has been shown that during that time nearly the whole of the advances made to the various State Governments, and over one hundred millions of private advances, have been obtained in Great Britain. This condition of dependence on external capital for the development of the country has on more than one occasion proved a great danger to Australasia, but never to the same extent as during the crisis of 1892–93, when the withdrawal of confidence on the part of the British investor caused widespread confusion in almost every department of industry, and intense financial unrest, from which some of the colonies have not yet recovered, although, as will be seen from the appended table, Australasian stocks are now quoted at satisfactory prices.

The quotations for Colonial stocks in the London markets at the close of June, 1892, 1893, 1894, and 1900 are given below, the price in every instance being "cum dividend." With one exception—India—the quotations are for loans raised on the security of the local revenues of the country borrowing; in the case of India there is an Imperial guarantee. This advantage has also been extended to some Canadian, Mauritius, and New Zealand loans, but these are not quoted in the following list. In passing, it may be mentioned that the guarantee of the British Government is certainly to the advantage of the dependencies to which it has been extended, as in addition to the absolute security afforded, it carries the right of trustees in the United Kingdom to invest trust funds in the stock—a privilege not extended to Australasian securities in general:—

Country.	Class of Stock.	Selling Price, "cum dividend."			
		June, 1892.	June, 1893.	June, 1894.	June, 1900.
Australasia—					
New South Wales	3½ per cent. Inscribed	96⅞	93	98⅞	104
Victoria	3½ do do ...	97	88½	97½	102
Queensland	4 do do ...	103½	99	104	106
South Australia	4 do do ...	106	103	106½	108
Western Australia	4 do do ...	103½	104	108	114
Tasmania	4 do do ...	103	98½	103	101
New Zealand	4 do do ...	104½	104½	108⅞	110
Canada	3 do do ...	94½	96	97	102
Cape Colony	4 do do ...	106	108	112	107
Natal	4 do do ...	103	108	109	112
India	3 do Stocks	97¼	98½	99¼	99

In order to make the comparison between different stocks quite fair, other things than bare quotations on a given date—chiefly the accrued

interest and the unexpired currency of the scrip—have to be considered. A uniform date for the payment of interest on loans has not been adopted, so that the amount of interest accrued at the above-quoted dates varies with each loan; while the date on which the loan is repayable is a factor not to be neglected in estimating the price of a stock. The return obtained by investors from the inscribed stock of each colony on the basis of previous quotations, allowing for interest accrued and redemption at par on maturity, is given below :—

Country.	Nominal rate of Interest.	Selling Price, "ex dividend."	Currency.	Effective annual Rate of Interest per £100 sterling. If no allowance is made for redemption at par on maturity.	Effective annual Rate of Interest per £100 sterling. Rate if Stock is held till date of maturity.
	℔ cent.	£	Years.	£ s. d.	£ s d.
June, 1892.					
Australasia—					
New South Wales	3½	96·19	32	3 13 5	3 14 2¾
Victoria	3½	95·45	31	3 13 11¾	3 15 0
Queensland	4	101·72	32	3 19 5	3 19 1¼
South Australia	4	105·22	44	3 16 9½	3 16 4
Western Australia	4	101·72	42	3 19 5	3 19 3
Tasmania	4	101·22	16	3 19 10	3 19 0
New Zealand	4	104·05	37	3 17 8	3 17 1¼
Canada	3	93·17	46	3 4 10½	3 5 7½
Cape Colony	4	105·89	31	3 16 3¾	3 15 1½
Natal	4	102·55	34	3 18 9½	3 18 4½
India	3	96·69	56	3 2 6¼	3 2 9
June, 1893.					
Australasia—					
New South Wales	3½	92·33	31	3 16 5½	3 18 2¼
Victoria	3½	86·97	30	4 1 2¼	4 4 3¼
Queensland	4	97·25	31	4 3 1	4 3 7½
South Australia	4	102·23	43	3 19 0¼	3 18 10
Western Australia	4	102·25	41	3 19 0¼	3 18 9½
Tasmania	4	96·75	15	4 3 6	4 6 0¼
New Zealand	4	104·06	36	3 17 8	3 17 1
Canada	3	94·68	45	3 3 10	3 4 5½
Cape Colony	4	107·90	30	3 14 10½	3 13 2¼
Natal	4	107·56	33	3 15 1½	3 13 9¾
India	3	97·92	55	3 1 8¾	3 1 0¼

Country.	Nominal rate of Interest.	Selling Price, "ex dividend."	Currency.	Effective annual Rate of Interest per £100 sterling. If no allowance is made for redemption at par on maturity.	Effective annual Rate of Interest per £100 sterling. Rate if Stock is held till date of maturity.
	℔ cent.	£	Years.	£ s. d.	£ s. d.
June, 1894.					
Australasia—					
New South Wales	3½	98·21	30	3 11 10¾	3 12 4
Victoria	3½	95·92	29	3 13 7¼	3 14 8
Queensland	4	102·25	30	3 19 0¼	3 18 6½
South Australia	4	105·74	42	3 16 5	3 15 10½
Western Australia	4	106·25	40	3 16 0½	3 15 4¼
Tasmania	4	101·25	14	3 19 9½	3 18 9
New Zealand	4	108·45	35	3 14 6	3 13 2½
Canada	3	95·68	44	3 3 2¼	3 3 8
Cape Colony	4	111·91	29	3 12 2½	3 9 5
Natal	4	108·57	32	3 14 5	3 12 9¾
India	3	98·68	54	3 1 3	3 1 4¼
June, 1900.					
Australasia—					
New South Wales	3½	103·15	24	3 8 5½	3 7 3¼
Victoria	3½	100·27	23	3 10 5	3 10 3¾
Queensland	4	104·02	24	3 17 8	3 16 3¾
South Australia	4	107·02	36	3 15 6	3 14 6
Western Australia	4	112·02	34	3 12 1½	3 10 1½
Tasmania	4	99·02	8	4 1 7	4 3 5¼
New Zealand	4	109·34	29	3 13 10¾	3 11 8¾
Canada	3	100·52	38	3 0 1¾	3 0 0½
Cape Colony	4	106·68	23	3 15 8¾	3 13 3¾
Natal	4	111·02	26	3 12 9¼	3 9 7
India	3	98·27	48	3 1 9	3 1 11

The figures given in the last column of the table show the relative positions of the various stocks quoted. As will be seen, the credit of each division of Australasia was somewhat better in 1894 than in 1892, notwithstanding the financial panic which occurred between

those dates. In 1893 there was naturally a heavy fall, as compared with the preceding year, in all Australasian securities except those of New Zealand and Western Australia. Victorian stock showed the largest fall—which was only to be expected in view of the fact that the panic originated in that colony, and Victorian finances generally were at a low ebb. The quotation for New Zealand stock at the middle of 1893 was the same as that of the preceding year, which seemed to point to the conclusion that the London market did not consider the interests of New Zealand to be bound up with those of the colonies on the mainland. In 1895 a great improvement took place in the prices of stock of all the colonies, and the rise has since been well maintained. To illustrate the fluctuations in the prices of colonial securities, the rates obtained during 1892, 1893, 1894, and 1900 are given below in a simpler form than in the preceding table. During the same periods British consols were selling at 98¼, 97, 99, and 100½:—

Country.	1892.	1893.	1894.	1900.
Australasia—	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	3 14 2¾	3 18 2¼	3 12 4	3 7 3¼
Victoria	3 15 0	4 4 3¼	3 14 8	3 10 3¾
Queensland	3 19 1¼	4 3 7½	3 18 6½	3 16 3¾
South Australia	3 16 4	3 18 10	3 15 10½	3 14 6
Western Australia	3 19 3	3 18 9½	3 15 4¼	3 10 1½
Tasmania	3 19 0	4 6 0¼	3 18 9	4 3 5¼
New Zealand	3 17 1¼	3 17 1	3 13 2½	3 11 8¾
Canada	3 5 7½	3 4 5½	3 3 8	3 0 0½
Cape Colony	3 15 1½	3 13 2¼	3 9 5	3 13 3¾
Natal	3 18 4½	3 13 9¾	3 12 9¾	3 9 7
India	3 2 9	3 1 0¼	3 1 4¼	3 1 11

So far only the return yielded to the investor has been considered. The following table shows the average prices obtained by the Australasian Governments for some of their last issues, and the quotations for

the same stocks in June, 1900, the latter prices being, of course, "ex dividend":—

State.	Date of Negotiation.	Rate per cent.	Amount of Issue.	Average price realised.	Quotation, ex-dividend, June, 1900.
			£	£	£
New South Wales.....	1895	3	4,000,000	95·14	98·27
Do	1898	3	1,500,000	98·65	98·27
Victoria	1893	4	2,107,000	96·00	104·03
Do	1899	3	1,600,000	93·21	†
Queensland	1897	3	1,500,000	95·61	94·52
South Australia.....	1896	3	839,500	95·34	90·52
Do	1897	3	500,000	96·05	90·52
Do	1899	3	1,500,000	92·67	90·52
Do	1900	3	1,000,000	*	†
Western Australia	1897	3	1,000,000	93·45	90·51
Do	1898	3	1,000,000	94·76	†
Do	1898	3	1,000,000	91·64	90·51
Do	1900	3	1,000,000	*	†
Tasmania	1895	3½	750,000	98·30	100·27
New Zealand.....	1895	3	1,500,000	93·73	96·27
Do	1899	3	1,000,000	*	†

* Not yet brought to account. † No quotation.

Character of Stock Issued.

By far the larger part of Australasian loans is inscribed, and the outstanding issues under the debenture system are being converted into inscribed stock as quickly as circumstances permit. New Zealand was the first colony to introduce inscription in 1877, in which year was passed the Consolidated Stock Act, a measure made necessary by the abolition of the Provincial Councils. Under this Act the liabilities of the various provinces were merged into the general debt of the colony; and under the same Act and its amendment of 1884 the Government has worked systematically to consolidate the debt by conversion and inscription, so that in March, 1900, the whole of the public liabilities were inscribed, with the exception of £6,265,686 represented by debentures. The Consolidated Stock Act of New Zealand was assented to in December, 1877; and in August of that year the Imperial Parliament passed the Colonial Stock Act, which provided for the inscription and transfer of Colonial stock raised in the United Kingdom. Certain steps were required to be taken before a colony could take advantage of the provisions of the Imperial Act. As already mentioned, New Zealand passed the necessary legislation at the end of 1877; but nothing was done by the other colonies until 1882, when Victoria and South Australia passed Inscribed Stock Acts; New South Wales and Queensland passed similar legislation in the following year, Western Australia in

1884, and Tasmania in 1889. It will thus be seen that a gradual change in the mode of floating loans for public purposes has been going on since 1877, and the time cannot be far distant when the whole debt of each colony will be represented by one class of stock. In 1879, or two years after passing the Consolidated Stock Act, New Zealand placed on the market a 5 per cent. loan of £5,000,000 at 97½ in the form of debentures, the subscribers having the option up to March, 1881, of exchanging for 4 per cent. inscribed stock, at the rate of £120 of stock for each £100 of debentures. The loan was successfully floated, and within the stated period £4,476,000 of the £5,000,000 debentures were exchanged for £5,371,200 inscribed stock at 4 per cent. The other colonies issued inscribed stock loans shortly after passing the respective Acts.

The Imperial "Colonial Stock Act, 1877," as previously mentioned, provides for the inscription and transfer of stock raised in the United Kingdom and for stamp duty to be levied thereon. It also defines the position of the British Government as regards Colonial indebtedness, and provides that every document connected with stock transactions shall have printed upon it a distinct intimation that no liability, direct or indirect, is incurred by the British Government in respect of such stock, unless the loan is under Imperial guarantee.

The difference between registered and inscribed stock is practically small. Transactions under the former head are confined to a few old funded stock loans. Debentures and inscribed stock form the principal classes of securities, and, as previously pointed out, the debenture form is rapidly giving way to inscription. Debenture coupons are, like ordinary scrip, negotiable by bearer, and are liable to the risk of forgery. By inscription the possibilities of fraud in transfer are minimised, as the stock is inscribed in the books of the bank, and transferable therein by the stock-holders personally or by their attorneys, without the issue of certificates of stock. In the case of registered stock, certificates are issued transferable by deed.

The practice of issuing treasury bills, either in anticipation of or to make good deficiencies in revenue, obtains in each colony, and, as previously explained, is an old-established custom; but treasury bills have been made to serve another purpose, and money has been raised by their sale to meet certain obligations for public works. This is an innovation which could not well be avoided in the disturbed markets of the last few years. The bills are in reality ordinary loans with short currencies, and carry generally a higher rate of interest than issues of the funded debt. The unsatisfactory state of Australasian finance does not allow of the absolute redemption of these bills; consequently they will either have to be renewed or converted into stock, an operation which will entail an additional expenditure to the charges of first negotiation. The New Zealand treasury bills are issued direct by the Treasury at par, and the expenses of negotiation are small. The bills are usually redeemed during the year of issue, and for this reason they have not been included with or considered as part of the public debt of New Zealand, though

in the case of the other colonies treasury bills have been so included. Australasian treasury bills are like the British treasury bills in name only, but they have some points in common with the British exchequer bills.

Conversion and Consolidation of Loans.

Conversion and consolidation as applied to loans are not interchangeable terms, but represent two distinct transactions in so far related that without conversion consolidation would be impracticable. All the colonies are systematically converting their old loans into inscribed stock, and by so doing they are taking a step towards consolidation. Since the Consolidated Stock Act was passed in 1877, New Zealand has been engaged in converting its old loans into inscribed stock, and consolidating the whole debt by adopting three uniform interest rates of 4, 3½, and 3 per cent., and fixing the dates of maturity at 1929, 1940, and 1945 respectively. The transactions in conversion and consolidation in New Zealand from 1877 to 31st March, 1900, were as stated below. In addition to the transactions shown, old debentures to the amount of £5,716,000 were converted into short-dated debentures under the 1884 Consolidated Stock Act, pending subsequent conversion into inscribed stock; of these short-dated debentures, £4,257,700 have since been converted into 4 per cent. stock, and are included in the £19,724,400 shown below. The amount of these debentures outstanding on 31st March, 1900, was £1,458,300 :—

Amount of Old Debentures Converted or Redeemed.	Additional Capital added to Principal by Conversion or Consolidation.	New Stock Issued.		
		Nominal Rate of Interest.	Amount.	Date of Maturity.
£	£		£	
19,724,400	1,600,902	4 per cent.	21,325,302	1929
5,720,550	440,617	3½ ,,	6,161,167	1940
3,325,546	40,135	3 ,,	3,365,681	1945

The loading of the principal by conversion appears heavy; but New Zealand was saddled with a number of small loans, much after the type of municipal borrowings, which it was most desirable should be consolidated without delay, and some sacrifice was made to accomplish this; besides, the compensation obtained in a lower rate of interest must be set against the increased capital. The annual saving in interest on the amount converted to the 31st March, 1900, is stated as £202,507, viz., £102,114 on the 4 per cent., £65,049 on the 3½ per cent., and £35,344 on the 3 per cent. stock. All conversions into short-dated debentures took place at par, the saving in interest thereby amounting to £7,705 annually, in addition to the £202,507 shown above. The subject of the New Zealand conversion is a large one, and inquirers should consult the

publications of the Government of that colony, which give details that would hardly be in place in a volume such as this.

In Victoria the 4 per cent. stock floated in Melbourne to the amount of £2,089,613 has been converted into 3 per cent. stock, with the exception of £120,062 subsequently redeemed. The saving in interest by the conversion is £19,696.

Late Issues of Loans and Treasury Bills.

As late as the year 1890 the colonies could borrow in London on very favourable terms, but in the year named the conditions were no longer satisfactory. This change had for its immediate cause a condition of things not of Australasia's own creation, the Baring failure and the Argentine crisis being primarily responsible for the stoppage of Australasian credit; but there is no reasonable ground for supposing that if the Baring failure had not taken place the London markets would have been much longer open to the Australasian colonies. The Treasurers of the various provinces were entirely unprepared for this revulsion in credit. They were committed to engagements for the construction of public works which they could not terminate; contracts had been entered into for large sums on the assumption that funds would be available; besides this, no preparations had been made to meet debentures falling due in a short time. The sudden stoppage of credit greatly embarrassed the Governments, and most of the colonies had recourse to treasury bills to enable them to adjust their finances to the altered circumstances. The amounts received from the sale of these bills were devoted to meeting loans maturing, and providing funds for public works already contracted for. Pressing necessities and the improved condition of the London market encouraged several of the colonies during 1893 and 1894 to place ordinary loan issues, which were successfully negotiated; and the proceeds of these loans relieved the liabilities on matured treasury bills and current obligations. In 1895 the credit of the Australasian colonies was fully re-established in London.

New South Wales.—In 1892 and 1893 the Treasury had authority to issue £3,000,000 of 4 per cent. funded stock at a minimum price of par. Up to the 30th June, 1900, £2,549,350 had been disposed of, leaving stock to the amount of £450,650 yet to be raised, the cost of the issue being practically nil.

The Loan Acts 58 Vic. No. 14, 59 Vic. No. 6, and 60 Vic. No. 32, passed in 1894, 1895, and 1896 respectively, provided for the establishment of other local stocks. The stocks under the first-mentioned Act are known as New South Wales 1924 stock and Funded Stock, the latter running *pari passu* with the stock floated under 56 Vic. No. 1, the amounts outstanding on 30th June, 1900, being £198,065 and £863,947 respectively; the stocks under the 1895 Act are known as New South Wales 1925 Stock and Funded Stock, the latter also being

subject to the same conditions as that floated under 56 Vic. No. 1 (Funded Stock Act of 1892). The amounts outstanding on the 30th June, 1900, were £222,255 and £1,332,945 respectively. The stocks under the 1896 Act are known as New South Wales 1927 Stock and Funded Stock, and are subject to conditions similar to those imposed in respect of the issues under the 1894 and 1895 Acts. Up to the 30th June, 1900, sales of 1927 stock had been effected to the extent of £1,262,757. The rate of interest on the stock is 3 per cent., and the date of maturity, 1912. The only expense attached to the issues was a small amount for brokerage. Provision has been made for sinking funds to liquidate certain portions of the loans expended on works of an unproductive character.

The Loan Act of 1899 gave authority for the local issue of £500,000 inscribed stock at 3 per cent., and maturing in 1919, for the purpose of making advances to settlers. Of this stock, £220,050 were issued to the 30th June, 1900. As in the case of the 4 per cent. funded stock, the only expense in connection with the later local issues of funded and inscribed stock was a small amount of brokerage.

In October, 1893, an inscribed stock loan of £2,500,000 was floated in London, the rate of interest being 4 per cent., and the currency forty years. The minimum price was fixed at 98½, and the average price realised was £100 11s. 10½d. The rate paid by the Government, allowing for redemption at par on maturity, was £4 3s. 0¼d.; while the return to investors was £4 1s. 8½d.

During 1894 several small 5 per cent. loans matured, amounting in the aggregate to £832,000. In September of that year a 3½ per cent. covering loan was successfully issued, the average price realised on the gross proceeds being £101 15s., which is reduced to £99 13s. 6d. if allowance be made for accrued interest and charges. The rate paid by the Government is £3 10s. 11d. per cent., and the interest yielded to investors, £3 9s. 4¼d. The loan was subscribed over five-fold, the amount tendered being £4,268,000.

In October, 1895, an inscribed stock loan for £4,000,000 was floated, the rate of interest being 3 per cent., and the currency forty years. The minimum price was fixed at 94, and the gross proceeds averaged £96 18s. 3d. No further loans were placed on the London market until January, 1898, when a loan of £1,500,000, bearing interest at 3 per cent., with a minimum of 99, was successfully floated, the gross proceeds being £1,506,269.

In 1895 authority was given to issue treasury bills to the amount of £1,174,700 to cover the accumulated deficiencies in revenue on the 30th June of that year. The rate of interest allowed is 3 per cent., and a sum of £150,000 is set aside annually for the repayment of the debt, together with the treasury bills issued under the Act of 1889.

Victoria.—An inscribed stock loan of £2,107,000 was floated in London in October, 1893, the rate of interest being 4 per cent., and the date of maturity between 1911 and 1926, at the option of the

Government on due notice being given. A 3 per cent. inscribed stock loan of £1,600,000 was floated in London in February, 1899—the minimum price fixed being £95. The gross proceeds amounted to £1,522,835, and the net proceeds to £1,491,355, or to £93 4s. 2d. per £100. The date of maturity is from 1929 to 1949. Four per cent. debentures were also disposed of locally from March, 1893, to June, 1900, to the amount of £746,795.

During 1896 an Act was passed providing for the conversion of the 4 per cent. stocks on the Melbourne register into a 3 per cent. stock. The amount of 4 per cent. stock sold from January, 1895, to June, 1900, was £249,130, holders of which have availed themselves of the privilege of conversion. The amount of new 3 per cent. stock sold under the Conversion Act to 30th June, 1900, was £2,290,482.

An issue of 4 per cent. treasury bills in aid of revenue to the amount of £1,250,000 was authorised in 1893; in 1898, however, the amount was reduced to £250,000. The amount sold to 30th June, 1900, was £250,000.

In September, 1896, authority was given for the issue of £375,000 treasury bills for public works and services. The amount sold to the 30th June, 1900, was £300,000, bearing interest at 3¼ per cent., and repayable in annual instalments of £25,000 each, the first payment having been made on the 1st January, 1900. The total amount of treasury bills outstanding under this Act on the 30th June, 1900, was £275,000.

A further issue of £1,000,000 treasury bills was authorised in December, 1898, and, to the 30th, June, 1900, bills to the amount of £250,000 were sold locally at 3½ per cent. interest, and to the amount of £500,000 at 4 per cent. interest in London. The total amount of treasury bills outstanding on 30th June, 1900, was, therefore, £1,300,000.

Queensland, in January, 1893, placed a 3½ per cent. loan of £1,182,400 on the London market, the average price obtained being £88 16s. 4d. The charges were heavier than usual, as the loan was underwritten at the rate of 1 per cent.

In June, 1895, another 3½ per cent. loan for £1,250,000, with a currency of fifty years, was placed on the market. The gross price obtained was £101 12s. 7d., and deducting accrued interest the Government received about £100 0s. 2d. In addition, stock to the amount of £750,000 was sold locally, the net proceeds being £743,750, or £99 3s. 4d. per £100.

In June, 1897, a 3 per cent. loan for £1,500,000, repayable in 1947, was floated in London, the average price realised being £97 1s. 5d. Local sales of 3 per cent. stock were also negotiated during the year, the total issued being £124,480, which was sold at the average price obtained in London.

Another class of stock was authorised in 1895, viz., Government Savings Bank Stock. The object of the establishment of this class of security was to enable depositors of over £200 to earn interest on such

excess. On the 30th June, 1900, the amount outstanding was £1,066,090, of which £979,530 is bearing interest at 3½ per cent., and £86,560 at 3 per cent.

During 1893 three issues of treasury bills were placed locally, viz., £222,500 in January, £5,000 in April, and £11,000 in December. The rate of interest was 4 per cent., and the bills have been redeemed. In January, 1894, bills to the amount of £1,000 were also disposed of locally, the rate being the same as for the previous issues, and the date of redemption, 1903. Bills to the amount of £286,000, which were issued during 1897–8, under the 1893 Act, have been purchased with the proceeds of the Savings Bank Stock, and the only treasury bills outstanding on the 30th June, 1900, were those for £1,000 mentioned above.

South Australia.—In 1893 a small loan of £125,000, being portion of the 1890 loan of £1,532,900, was floated in London. The rate of interest is 3½ per cent., and the loan is redeemable in 1939. An instalment of the £1,013,279 loan of 1892 was placed in Adelaide in February, 1894. The amount of the issue was £200,000, the price realised per £100 being 92. The rate of interest is 3½ per cent. In June, 1895, a further issue of £311,000 was floated in Adelaide. In February, 1896, a loan of £839,500 was issued in London, bearing interest at 3 per cent., and redeemable in 1926. The net proceeds, after allowing for charges and accrued interest, amounted to £800,406, or £95 6s. 10d. per cent. In May, 1897, the first of a number of loans under the "Consolidated Stock Act" was floated in London, amounting to £500,000. Further issues took place in Adelaide for £295,835 and £606,800 ; in London and Adelaide, for £1,500,000 ; and in Adelaide, for £249,075. Of the last issue, £36,000 were sold at par, on condition of being placed on the London Register, while the balance realised £98 17s. 3d. per cent. The first issue of £500,000 was sold for £95 10s. ; the £606,800, for £98 2s. ; and the £1,500,000, for £92 13s. 5d. per cent. The total issues under the "Consolidated Stock Act" amounted to £3,151,710. All these loans bear interest at the rate of 3 per cent., and mature in 1916. On the 4th April, 1900, an issue of £1,000,000 at 3 per cent. was floated in London, being part of the loan authorised under the "Public Purposes Loan Act of 1898," the minimum price being fixed at 94½. The net proceeds, after allowing for charges, amounted to £92 3s. 1½d. per £100.

In June, 1892, treasury bills were issued to the amount of £349,225 with interest at the rate of £4 11s. 3d. per cent., and payable in five years ; and in March and July, 1893, further issues of £250,000 each were made bearing the same rate ; the bills have all been redeemed.

Western Australia.—In June, 1894, a loan of £540,000, at 4 per cent., was floated in London at a minimum of 102, the average price realised being £103 6s. 1d. In May, 1895, the colony floated a 3½ per cent. loan of £750,000, having a forty years' currency, but redeemable

from 1915 on twelve months' notice being given. The minimum price was fixed at 99, and the average obtained was £103 1s. 5d., or, deducting accrued interest, £101 9s. 2d.

In May, 1896, Western Australia, following the example of New Zealand and New South Wales, placed on the market a 3 per cent. loan for £750,000, having a currency until 1935, but redeemable from 1915 on twelve months' notice being given. A sinking fund is to be established in connection with this loan, commencing three years after flotation, the contribution being 1 per cent. per annum. The gross price obtained was £100 16s. 8d., and the accrued interest amounted to about 7s. 6d., so that the Government obtained £100 9s. 2d. This is the cheapest loan yet floated by any of the Australasian colonies.

In May, 1897, an issue of £1,000,000 was floated in London, the minimum price being fixed at 95, and the rate of interest 3 per cent. The loan is redeemable in 1935, and the net proceeds per £100, after allowing for charges and accrued interest, amounted to £93 8s. 11d.

In January, 1898, an issue of £1,000,000 was placed in London, being the first instalment under the Coolgardie Gold-fields Water Supply Loan Act, the minimum price being fixed at £95, and the rate of interest 3 per cent. For this, applications to the amount of £2,891,250 were received. The loan matures in 1927, and the net proceeds were £94 15s. 3d. per £100.

In July, 1898, a further issue of £1,000,000 was floated in London, being the second instalment under the Loans Act of 1896, the minimum price being fixed at £94, and the rate of interest 3 per cent. At the public tendering only £550,000 were offered, which brought an average price of £94 3s. 4d. The balance was sold afterwards at the minimum, which brought the average down to £94 1s. 10d. per cent. The loan is redeemable in 1935, and the net proceeds per £100 amounted to £91 19s. 4d.

In March, 1900, another issue of £1,000,000 was floated in London, the minimum price being fixed at £93½, and the rate of interest 3 per cent. The amount offered was £1,570,000, and the average price obtained was £93 12s. 9¾d. per cent.

The Government has authority to issue treasury bills, and the amount outstanding on the 30th June, 1900, was £1,800,000, of which £1,000,000 bears interest at 4 per cent., and the balance at 3½ per cent. Of the total amount, £300,000 were repayable in 1900 and £1,500,000 in 1901.

Tasmania, in March, 1893, issued a 3½-per cent. loan of £800,000, which was part of the £2,100,000 authorised in December, 1892. The loan was only a partial success, £600,000 being taken up and the balance withdrawn. The average price realised per £100 was £92 2s. 2d. In 1894 a loan of £1,000,000 was negotiated in London, the rate of interest being 4 per cent., and the date of maturity between 1920 and 1940, at the option of the Government on 12 months' notice being given. The average amount realised per £100 was £101 4s. 3d. In February,

1895, a 3½ per cent. loan of £750,000 was floated, redeemable in 1940, or from 1920 on 12 months' notice being given. The price realised was £98 6s. 1d.

In 1895 authority was given for the issue of £250,000 "local inscribed stock" to cover deficiencies in revenue, and in 1896 and 1897 further sums of £250,000 in each year, and a sum of £100,000 in 1898, were authorised. Prior to the passing of the Appropriation Act of 1899 the whole of the local inscribed stock hitherto raised in the Colony was placed in the Treasury books to an account for stock raised temporarily in aid of Consolidated Revenue; but as the amount raised was far in excess of revenue requirements, and was largely being used to meet expenditure on loans and public works accounts, which had not otherwise been provided for, a transfer of the whole of the local inscribed stock then issued, and maturing subsequently to the year 1900, was effected by that enactment, and was marked as an addition to the funded debt of the Colony. The amount so treated was £510,747, leaving a sum outstanding on the 31st December, 1899, of £91,727, of which £36,120 is earning 3½ per cent., and £55,607 returning 3 per cent., repayable in 1900.

During 1894, treasury bills to the amount of £96,900 were negotiated in the colony, viz., £40,500 at 4 per cent. and £56,400 at 4½ per cent., the bills having a currency until 1899 and 1900 respectively. The total amount of treasury bills floated was £215,000, and £50,000 were outstanding on 31st December, 1899. Of these, £46,900 are bearing interest at 4½ per cent., and £3,100 at 4 per cent. The bills are redeemable in 1900.

New Zealand.—Under the amending Consolidation Act of 1884, short-dated debentures are issued pending the sale of inscribed stock under the Act of 1877. In May, 1895, New Zealand placed a loan for £1,500,000 on the market. With the exception of some New South Wales treasury bills, this was the first 3 per cent. loan floated by any of the Australasian colonies. The loan has a currency of fifty years, and the minimum price was fixed at 90. The average gross price obtained was £94 8s. 9d., so that, after deducting accrued interest, the Government obtained £93 14s. 6d.

In February, 1899, a further issue of £1,000,000 was placed in London, the minimum price being fixed at £96, and the rate of interest 3 per cent. For this stock applications to the amount of £3,027,500 were received. The loan is redeemable in 1945, and the average price secured was £96 11s. per cent.

The amount of treasury bills outstanding on the 31st March, 1899, was £710,000; the issue during the ensuing twelve months amounted to £930,000, while bills representing £940,000 were paid off, leaving the amount outstanding on the 31st March, 1900, at £700,000. As, however, allowance is made for these at the end of the financial year when carrying forward the balance of the Revenue Account, the liability is practically wiped out.

The particulars of the latest issues of the Funded Debts negotiated in London for which particulars are available are as follow :—

State.	Year of Issue.	Year of Maturity.	Nominal—		Net Proceeds, less charges and accrued Interest.		Effective annual Interest per £100 sterling, paid by Government.	
			Interest.	Amount of Loan.	Total.	Per cent.	Nominal Interest on net Proceeds.	Rate paid, allowing for redemption at par. on maturity.
			per cent.	£	£	£	£ s. d.	£ s. d.
New South Wales.....	1893	1933	4	2,500,000	2,440,549	97·62	4 2 9¼	4 3 0¼
,, ...	1894	1918	3½	832,000	829,551	99·70	3 10 10	3 10 11
,, ...	1895	1935	3	4,000,000	3,804,573	95·14	3 3 6½	3 4 3½
,, ...	1898	1935	3	1,500,000	1,479,746	98·65	3 1 3¼	3 1 6
Victoria.....	1892	1921–26	3½	2,000,000	1,810,666	90·53	3 18 0	3 19 8¾
,, ...	1893	1911-26	4	2,107,000	1,999,733	94·91	4 5 1½	4 6 0
,, ...	1899	1926–49	3	1,600,000	1,491,355	93·21	3 4 4	3 5 7
Queensland	1893	1930	3½	1,182,400	1,014,162	85·77	4 2 4	4 4 4½
,, ...	1895	1945	3½	1,250,000	1,230,274	98·42	3 11 9	3 11 10¼
,, ...	1896	1947	3	1,500,000	1,434,122	95·61	3 3 2¾	3 3 7½
South Australia	1890–4	1939	3½	1,532,900	1,417,457	92·47	3 16 4¼	3 17 0
,, ...	1892–4	1939	3½	513,200	497,052	96·85	3 12 11	3 13 2¼
,, ...	1896	1926	3	839,500	809,406	95·34	3 3 5	3 4 8½
,, ...	1897	1916	3	500,000	480,246	96·05	3 2 11¼	3 5 4¾
,, ...	1899	1916	3	1,500,000	1,390,084	92·67	3 5 2¾	3 10 2½
,, ...	1900	*	3	1,000,000	*	*	*	*
Western Australia....	1892	1911–31	4	400,000	393,211	98·30	4 2 2¼	4 2 4½
,, ...	1894	1911–31	4	540,000	544,964	100·92	4 0 0¾	4 0 0
,, ...	1895	1915–35	3½	750,000	760,934	101·46	3 9 7	3 9 5
,, ...	1896	1915–35	3	750,000	744,542	99·27	3 0 10¾	3 1 0
,, ...	1897	1915–35	3	1,000,000	934,465	93·45	3 4 8¼	3 5 9¾
,, ...	1898	1927	3	1,000,000	947,610	94·76	3 3 4	3 5 3
,, ...	1898	1915–35	3	1,000,000	919,648	91·64	3 5 8	3 7 8
,, ...	1900	*	3	1,000,000	*	*	*	*
Tasmania	1893	1920–40	4	1,000,000	994,912	99·49	4 1 2½	4 1 3
,, ...	1895	1920–40	3½	750,000	737,308	98·31	3 11 10	3 12 0
New Zealand	1895	1945	3	1,500,000	1,394,117	92·94	3 5 0½	3 5 9¾
,, ...	1899	1945	3	1,000,000	*	*	*	*

* Not yet brought to account.

The treasury bills outstanding on the 30th June, 1900, were issued to cover deficiencies in revenue, with the exception of £1,504,000 in New South Wales, of which a sum of £4,000 is overdue, and £1,050,000 in Victoria, and £1,800,000 in Western Australia. Local inscribed stock to the amount of £591,484, outstanding in Tasmania, was also partly required for public works. The expenses incurred in these issues were practically nil, as the bills were sold at par, and in some cases even at a premium. Particulars of the cost of treasury bills negotiated prior to 1896 will be found in previous editions of this work.

Expenditure from Loans.

In the foregoing pages the chief points dwelt upon have been the amount of the public indebtedness and the credit enjoyed by each colony as tested by the selling price of its loans. Before closing this chapter it would be well to consider for what purpose the debts were incurred. The services upon which the proceeds of the public loans were expended are various, but the bulk of the expenditure may be placed to the account of the construction of railways, water supply and sewerage, and electric telegraphs. In the early stages of Australasian borrowing the expenditure was moderate, loans being difficult to raise and interest high; but latterly, as the conditions under which loans could be contracted became favourable, especially since 1881, few of the colonies have set any bounds to their requirements. It was a repetition of the old experience—the opportunity engendered the desire, and the open purses of the investors tempted the colonies to undue borrowing and lavish expenditure. What is termed a "vigorous public works policy" was the order of the day, and works were pressed forward which under other circumstances would either not have been undertaken, or have been held back until the growth of population warranted their construction. The plethora of money has been harmful in many ways, the most apparent being the construction of not a few branch railways, in outlying and sparsely-settled districts, which do not pay even their working expenses. But when every allowance is made for unwise or improvident expenditure, it will be found that by far the larger portion of the proceeds of loans has been well expended. In some instances it will be years, taking a most hopeful view of the situation, before many of the revenue-producing works will yield a sum sufficient to pay working expenses and interest; nevertheless, a practical consideration of the conditions which surround Australasian settlement will demonstrate that in some instances the construction of these works was justifiable, for apart from the consideration that they will ultimately be self-supporting, they have already materially assisted in developing the country's resources, and have largely enhanced the value of the public estate. Whether their cost

in all cases should have been charged against the loans account is a different matter, seeing that the rents obtained from public lands, and proceeds of sales, invariably go into the ordinary revenue of the colonies.

The following statement gives, under a convenient classification, the loan expenditure of each colony during 1899–1900 :—

State.	Year ended.	Amount spent on Works yielding direct Revenue.				Other Works and Services.	Total.
		Railways.	Water Supply and Sewerage.	Electric Telegraphs.	Total.		
		£	£	£	£	£	£
New South Wales ..	30 June, 1900	857,343	420,455	84,334	1,362,132	849,449	2,211,581
Victoria	30 June, 1900	592,560	144,149	.....	736,709	294,954	1,031,663
Queensland	30 June, 1900	637,676	8,501	40,459	686,636	496,032	1,182,668
South Australia ..	30 June, 1900	184,629	284,382	24,888	493,899	108,751	602,650
Western Australia..	30 June, 1900	151,110	474,616	.....	625,726	291,682	917,408
Tasmania	31 Dec., 1899	64,967	.....	.....	64,967	111,290	176,257
Commonwealth..	.....	2,488,285	1,332,103	149,681	3,970,069	2,152,158	6,122,227
New Zealand.....	31 Mar., 1900	417,937	.....	26,771	444,708	1,126,896	1,571,604
Australasia		2,906,222	1,332,103	176,452	4,414,777	3,279,054	7,693,831

The expenditure of the Commonwealth colonies during 1899–1900 from funds derived from the proceeds of loans was £6,122,227. Of this amount, the sum of £3,970,069 was spent on services directly revenue-producing, and the remainder was chiefly devoted to works such as the construction of roads and bridges, the improvement of harbours and rivers, and the erection of lighthouses, schools, and public buildings, less obviously a proper charge against loan votes. The amount expended on fortifications and military works was relatively small. The loan expenditure of the seven Australasian colonies during 1899–1900 was £7,693,831, of which amount £4,414,777 was spent on works directly revenue-producing.

In most of the colonies the expenditure from loans was greatly reduced during the years 1893 to 1896. In some cases this was to be attributed to a settled policy of retrenchment; but in others, the difficulty of raising a loan in London afforded a more probable explanation. The expenditure, however, since 1896, shows a tendency to increase, the figures for the last financial year being largely in excess of the previous five years in the colonies of New South Wales, Victoria, Queensland, Tasmania, and New Zealand. In those five provinces the increased expenditure was chiefly made on account of revenue-producing works; and, also, in the case of New Zealand and Queensland the

amounts partly represented loans to local bodies. The expenditure of each province during the last five years is given in the following table :—

State.	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.
	£	£	£	£	£
New South Wales	1,279,098	1,477,318	1,644,743	2,032,634	2,211,581
Victoria	218,796	276,674	462,094	775,841	1,031,663
Queensland	592,158	1,148,341	937,066	1,054,787	1,182,668
South Australia	533,157	358,658	495,193	581,777	602,650
Western Australia	650,708	2,609,668	1,896,145	1,032,690	917,408
Tasmania	113,278	81,801	79,602	130,257	176,257
Commonwealth	3,387,195	5,952,460	5,514,843	5,607,986	6,122,227
New Zealand	971,855	1,088,316	1,134,651	1,543,111	1,571,604
Australasia	4,359,050	7,040,776	6,649,494	7,151,097	7,693,831

The total expenditure of the proceeds of loans from the commencement of borrowing to the end of the financial year 1899–1900 for the six Commonwealth colonies was £189,351,459, and for the whole of Australasia £233,224,783. Of these sums, £150,786,837, or considerably over three-fourths, was spent by the Commonwealth colonies, and £168,741,827, or nearly three-fourths, by the seven colonies in the construction of railways, water supply and sewerage works, and electric telegraphs; and the balance was expended on services which, though non-productive, were claimed by their proposers as being necessary in the interests of national development. The expenditure on defence and the payments made to meet deficiency in revenue are the exceptions to the rule which has governed the expenditure of the proceeds of loan issues. The expenditure to cover deficiency in revenue has not been large, and is looked upon as but a temporary charge on the loan funds ; while the expenditure on defence has been extremely small in all the colonies except New South Wales and New Zealand. The following table shows the total loan expenditure of each province up to the close of the last financial year :—

State.	Expenditure to—	Amount spent on works yielding direct Revenue.				Other Works and Services.	Total.
		Railways.	Water Supply and Sewerage.	Electric Telegraphs.	Total.		
		£	£	£	£	£	£
N. S. Wales	30 June, 1900	42,084,214	9,327,913	1,127,740	52,539,867	11,831,878	64,371,745
Victoria	30 June, 1900	36,794,980	8,342,382	....	45,137,362	3,554,413	48,691,775
Queensland	30 June, 1900	21,346,412	337,960	990,158	22,674,530	10,407,275	33,081,805
South Australia..	30 June, 1900	13,259,584	4,649,592	968,489	18,877,665	5,928,709	24,806,374
West'rn Australia	30 June, 1900	6,636,235	724,576	269,308	7,630,119	2,799,800	10,429,919
Tasmania	31 Dec., 1899	3,802,840	.....	124,454	3,927,294	4,042,547	7,969,841
Commonwealth	.....	123,924,265	23,382,423	3,480,149	150,786,837	38,564,622	189,351,459
New Zealand	31 Mar., 1900	16,450,303	648,630	856,057	17,954,990	25,918,334	43,873,324
Australasia	.....	140,374,568	24,031,053	4,336,206	168,741,827	64,482,956	233,224,783

In the New Zealand returns old provincial debts contracted prior to 1876, amounting to £11,535,469, have been included under the head "Other works and services," as there is no available record of the services upon which the loans of the old Provisional Governments were expended, except where such was for the construction of railways. The figures given for New South Wales, South Australia, Western Australia, and Tasmania under the head of "Railways" include loan expenditure on State tramways, but, except in the case of the first-mentioned colony, the amount thus expended is unimportant, as this service in the other provinces is generally in the hands of municipal authorities or private companies.

In the preceding table a large sum has been placed under the head of "Other works and services"; in the following statement this amount has been subdivided and is shown under several heads. In regard to New Zealand, the sum under the heading of "Miscellaneous" also includes the provincial loans prior to 1876; but it is certain that a very large proportion of this miscellaneous expenditure was incurred for war purposes, the cost of suppressing the Maori risings between 1860 and 1870 being charged to loan votes :—

State.	Roads and Bridges, Harbours, &c.	Defence Works.	Immigration.	Miscellaneous.	Total.
	£	£	£	£	£
New South Wales.....	6,286,408	1,356,356	919,163	3,269,951	11,831,878
Victoria	784,473	133,355	.....	2,636,585	3,554,413
Queensland.....	3,201,861	280,982	2,864,627	4,059,805	10,407,275
South Australia.....	2,747,510	244,073	.....	2,937,126	5,928,709
Western Australia	1,578,706	.....	23,371	1,197,723	2,799,800
Tasmania.....	2,387,921	123,854	235,000	1,295,772	4,042,547
Commonwealth....	16,986,879	2,138,620	4,042,161	15,396,962	38,564,622
New Zealand	5,837,603	1,003,523	2,147,505	16,929,703	25,918,334
Australasia	22,824,482	3,142,143	6,189,666	32,326,665	64,482,956

In the case of New South Wales the sum of £724,733, which was spent on immigration before the inauguration of the Loan Account, appeared in previous issues of this volume under miscellaneous expenditure; it now is shown under the proper heading.

The subjoined table shows the expenditure per inhabitant on the basis of the figures given in the table on page 823 :—

State.	Amount spent on Works yielding direct Revenue.				Other Works and Services.	Total.
	Railways.	Water Supply and Sewerage.	Electric Telegraphs	Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	30 18 5	6 17 0	0 16 7	38 12 0	8 13 11	47 5 11
Victoria	31 10 0	7 2 10	.....	38 12 10	3 0 10	41 13 8
Queensland	43 14 10	0 13 10	2 0 7	46 9 3	21 6 6	67 15 9
South Australia	35 18 0	12 11 10	2 12 5	51 2 3	16 1 1	67 3 4
Western Australia	37 4 10	4 1 4	1 10 3	42 16 5	15 14 3	58 10 8
Tasmania	20 17 2	.....	0 13 8	21 10 10	22 3 6	43 14 4
Commonwealth	33 1 5	6 4 10	0 18 7	40 4 10	10 5 10	50 10 8
New Zealand	21 13 9	0 17 1	1 2 7	23 13 5	34 3 5	57 16 10
Australasia	31 3 1	5 6 8	0 19 3	37 9 0	14 6 3	51 15 3

Expenditure by the Government and Local Bodies.

The question of Local Government is dealt with in another chapter. It is well, however, to give here a statement of the total amount which passes through the hands of the general and local governments. The sum can in no sense be taken as the cost of governing the various colonies ; as will appear from page 793, this may be taken as £16,952,307 for the six Commonwealth colonies, or £20,465,446 for the whole of Australasia.

The total sum expended by the general and local governments of the Commonwealth colonies during the year 1899–1900 was £37,454,398, or £10 1s. 2d. per head, and for Australasia £45,426,329, or £10 2s. 11d. per head. Of these large sums, £28,094,513, or £7 10s. 11d. per inhabitant, was spent by the general governments of the six Commonwealth colonies from their revenues, and £6,122,227, or £1 12s. 11d. per inhabitant, from loans ; the local expenditure—exclusive, of course, of a sum equal to the Government endowment—was £3,237,658, or 17s. 4d. per inhabitant. For the seven Australasian colonies the expenditure by the general government from revenue was £33,234,641, or £7 8s. 6d. per inhabitant, and from loans £7,693,831, or £1 14s. 4d. per inhabitant ; while the local expenditure, exclusive of government endowment, amounted to £4,497,857, or £1 0s. 1d. per inhabitant.

The following table shows the general, loan, and local expenditure for each colony :—

State.	General Government.		Local Government.	Total.
	From Revenue.	From Loans.		
	£	£	£	£
New South Wales	9,811,402	2,211,581	799,069	12,822,052
Victoria	7,318,945	1,031,663	1,173,039	9,523,647
Queensland	4,540,418	1,182,668	506,137	6,229,223
South Australia	2,936,619	602,650	336,408	3,875,677
Western Australia	2,615,675	917,408	275,993	3,809,076
Tasmania	871,454	176,257	147,012	1,194,723
Commonwealth	28,094,513	6,122,227	3,237,658	37,454,398
New Zealand	5,140,128	1,571,604	1,260,199	7,971,931
Australasia	33,234,641	7,693,831	4,497,857	45,426,329

The expenditure per inhabitant, under the same classification, will be found below. The distribution of the expenditure for New South Wales, between general and local government, is to some extent misleading, as over 40 per cent. of the population live outside the boundaries of the municipalities :—

State.	General Government.						Local Government.			Total.		
	From Revenue.			From Loans.								
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	7	4	8	1	12	8	0	11	9	9	9	1
Victoria	6	5	10	0	17	9	1	0	2	8	3	9
Queensland	9	8	3	2	9	0	1	1	0	12	18	3
South Australia	7	18	6	1	12	6	0	18	2	10	9	2
Western Australia	15	5	10	5	7	3	1	2	4	22	5	5
Tasmania	4	17	0	0	19	7	0	16	4	6	12	11
Commonwealth	7	10	11	1	12	11	0	17	4	10	1	2
New Zealand	6	16	6	2	1	9	1	13	5	10	11	8
Australasia	7	8	6	1	14	4	1	0	1	10	2	11

INDEX.

Absentee Incomes, 727
Accidents, Deaths from, 287
Adelaide, Annual and Capital Value, 624
  Corporation of, 98
  Municipal Council, 94
Advances, State, to Farmers, 545
Ages of the People, 255
Agricultural Education, 544
  Production, Value of, 503
Agriculture, 501
  Area under Cultivation, 504
  Increase of, 506
  Persons employed in, 506
  Value of Crops, 501
Akaroa, French Colonisation of, 181
Albany, Defence of, 317
  Foundation of, 17
Alcohol, Consumption of, 371.
Alien Races, 291
Alum, 588
Antimony, 574
Anti-Transportation League, 149
Areas and Boundaries, 1
Arms Importation Ordnance, 192
Arsenic, 579
Art Galleries, 360
Arthur, Governor, 143
Artesian Wells, 548
Assurance Companies, Assets and Liabilities, 761
  Expenses of Management, 762
  in various Countries, 763
  Life, 757
Asylums, Benevolent, 363
Auckland, Annual and Capital Value, 628
  Rainfall of, 10
Australasian Auxiliary Squadron, 38–312
Australian Exploration, 11, 13, 15, 16, 17, 18

Backhouse and Walker, 66
Bacon, Consumption of, 412
  and Ham, Production, 498
Bald Hills, Battle of, 212
Banking, 739
  Expenses of, 746
  in each Colony, 744
Bankruptcies, 767
Banks, Capital Resources of, 740
  Deposits, 752
  Liabilities and Assets, 741
  Metallic Reserves of, 746
  Queensland National, 80, 86
    Bank Act, 76
  Results of Working, 742
  Savings, 748, 752
Barkly, Governor, 48
Barley, Area under Cultivation, 521
  Average Yield, 522
  Import and Export, 523
  Production of, 522
  Value of Crops, 502, 523
Bass' Voyages, 41
Batman, John, 42
Beauchamp, Governor, 40
Beef, Consumption of, 412
  Frozen, Export of, 489, 492
Beer, Consumption of, 417, 418
Beeswax, Value of Production, 498
Beet, Cultivation of, 536
Belmore, Governor, 29
Benevolent Asylums, 363
Birthplaces, 297
Births, 257
  Illegitimate, 377
Bismuth, 575
Blackall, Governor, 79
Bligh, Governor, 14
Blue Mountains, Crossing of, 15
Boards and Trusts, Finances of, 633
  New South Wales, 629
  Other Colonies, 632
  Victoria, 631
Bores, Artesian, 548
Borrowing, Private and State, 728
Bourke, Governor, 17
Bowen, Governor, 54, 73, 215
Brandy, Production of, 531

Brisbane, Annual and Capital Value, 622
Arrival of Free Settlers, 66
Governor, 16
Proclamation as Municipality, 72
River, Discovery of, 62
Temperature, 8
Broken Hill Proprietary, 33
Browne, Governor, 153, 200
Bullion Act, 97
Burke and Wills, Explorations by, 49, 72
Burnett, Explorations by, 69
Busby, James, 172
Bushranging, 28, 143
Butter, Consumption of, 412
Export of, 496
Production of, 495
Buxton, Governor, 108

Cable Services, 714
Queensland and New Caledonia, 86
Cadell, Captain, Voyages of, 98
Cairns, Governor, 82, 106.
Camels, Introduction of, to South Australia, 104
Cancer, Deaths from, 282
Canowna, Gold Discovery, 71
Canterbury Association, 195
Gold Discoveries, 220
Pilgrims, The, 195, 197
Viscount, Governor, 53
Capital, Importation of, 726–735
Investments of, 726
Captain Cook's Voyages, 162
Hobson, 175
Carbon Minerals, Minor, 587
Carrington, Governor, 33
Cattle, 479
Cost of, 492
Dairy, 494
Number of, in each State, 480
Slaughtering Returns, 481
Value of Herds, 481
Centralisation of Population, 294
Charities, 360
Cheese, Consumption of, 412
Production of, 495
Childbirth, Deaths in, 286
China, Australian Contingents to, 311
Trade with, 344
Chinese Immigrants, 35
Immigration, Restriction of, 82
Restriction Act, 26, 33, 34, 292
Chromium, 578
Church and School Lands, 26.
Act of 1880, 33
Circulatory System, Deaths from Diseases of, 285.
Cities and Towns, Population and Annual Value, 629
Climate, 5
Clunie, Captain, 66
Coal, Discovery, 579
Export of, 582
Mines, Number of, 585
Production, 581, 584
Queensland, 80
World's Production, 585
Cobalt, 578
Coffee, Consumption of, 412
Coin and Bullion, Issues by Mint, 755, 756
Collins, Expedition of, 139
Governor, 42
Colonial Peerage, Establishment of, 20
Commerce, 332. (See also Trade.)
Companies, Assurance, 758
Investment, 747
Conference of Premiers, 39
Conjugal Condition, 299
Constitution Act of 1853, 19
South Australia, 99, 100
West Australia, 126
Constitutional Diseases, Deaths from, 280
Continuous Ministry, 223–227
Convictions in Superior Courts, 373
Cook, Captain, 162
Cooktown, Opening of, 81
Copper, Discovery of, 565
in South Australia, 95, 101
in Queensland, 75
Production of, 568
Corporations Indebtedness of, 635
Cost of Living, 419
Cotton Culture in Queensland, 65, 76
Council, N.S.W., Legislative, 25, 26
Crime, 364
Decrease of, 372
Executions, 374
Persons Charged, 366
Serious Offences, 368
Various Offences, 368
Crops, Proportionate Area under, 507
Total, and Average Values, 502
Croup, Deaths from, 275
Cultivation, Area under, 504
Calvert, Explorations by, 109
Cunningham, Allan, 17, 63, 64, 65
Currency, 754
Customs Revenue, 354

Dairy Farming, 494
Daly, Governor, 103
Darling, Downs, Discovery of, 64
Governor, 17
River, Early Navigation of, 17, 98

Darling, Sir Charles, Governor, 52
Davey, Governor, 141
Deaths, 258
Ages at, 262
Causes of, 264
from Accidents, 287
Cancer, 282
Constitutional Diseases, 280
Croup, 275
Developmental Diseases, 283
Diarrhœal Diseases, 276.
Dietetic Diseases, 280
Diphtheria, 274
Diseases of Circulatory System, 285
Diseases of Nervous System, 283
Local Diseases, 283
Measles, 270
Parasitic Diseases, 279
Phthisis, 280
Scarlet Fever, 271
Specific Febrile or Zymotic Diseases, 269
Typhoid, 278
Violence, 287
Whooping Cough, 272
in Childbirth, 286
Defence, 309
Cost of, 316
Naval, 312
Denison, Governor, 20, 148
De Thierry, 174
Developmental Diseases, Deaths from, 283
Diamonds, 590
Diarrhœal Diseases, Deaths from, 276
Dietetic Diseases, Deaths from, 280
Diphtheria, Deaths from, 274
Direct Taxation, Revenue from, 787
Diseases of Nervous System, Deaths from, 283
Dividend and Companies Tax, Western Australia, 782
Tax, Revenue from, 787
Queensland, 781
Divorce, 378
Domestic Produce, Exports of, 347, 349
Drunkenness, 370
Du Cane, Governor, 155
Duff, Governor, 39
Duke of Edinburgh, 29, 54
Dunbar, Wreck of, 22
Dutiable Goods, Average *ad valorem* on, 356

Eardley-Wilmot, Governor, 146
Education, 388
Act, Victoria, 54.
Education—
Agricultural, 544
Cost of, 396
Diffusion of, 402
General, 408
in Queensland, 74, 80
Secondary, 398
State Schools, 392
Technical, 406
University, 404
Electoral Bill of 1880, 33
Employment and Production, 595
Estates, Number and Value of, 724
Eureka Stockade, 48
Executions, 374
Exhibition, Intercolonial of N.S.W., 30
International, 31
Queensland, 74
Expenditure, Government and Local, 825, 826
Expenditure of the People, 419
Public, 771, 772.
Details of, 789
External from Commonwealth, 345
of Domestic Produce, 347
Price Levels of, 422
to British Empire, 339
to Foreign Countries, 342
Exports. (See Trade.)
Eyre, Edward John, Explorations of, 93

Favenc, Explorations by, 130
Fawkner, John, 42
Febrile Diseases, Deaths from, 269
Federal Convention, 109
Council, 58
Enabling Bill, 108
Referendum, 247
Federation, 21, 240, 248
Conference, 36
Convention, 38
Fergusson, Governor, 104, 221
Fiji, Annexation of, 31
Finance Private, 720
Public, 769
Financial Crisis of 1893, 39
Crisis of Melbourne, 59
Panic, Queensland, 77
First Fleet, 11
Fitzgerald, Governor, 120
Fitzroy, Governor, 19, 185
Land Policy of, 187
Taxation Policy of, 189
Flinders' Voyages, 41
Food and Beverage, Annual Cost of, 421
Foods, Consumption of, 412
Supply, 412
Thermo-dynamic Power of, 414

Forrest, Alexander, Explorations by, 128
John, Explorations by, 124, 129
Fortifications of Port Jackson, 21
Franklin, Governor, 145
French Invasion, Rumours of, 17
Friendly Societies, 763
Frozen Meat Trade, 488
Fruit, Imports and Exports, 542
Fyans, Captain, 66

Gardens and Orchards, Area under, 540
Value of Production, 542
Gate "Pa," 213
Gawler, Governor, 92
Gems and Gemstones, 589
Giles, Explorations by, 124, 127
Gipps, Governor, 18
Gippsland, Discovery of, 43
Gold, Alluvial and Quartz, 558
Discovery of, 19, 22, 44, 80, 133, 150, 157, 219, 552
Miners, Number of, 559
Movements of, 353
Nuggets, 559
Production of, 557, 560
Received at Mint, 755
Value of Production, 558
Gordon, Governor, 224
Grapes, Production of, 531
Grape Vines, Area under, 530
Value of Crop, 502, 533
Wine Production, 531
Grass Seed, Value of Crop, 502
Green Forage, Area under, 529
Value of, 502
Gregory, A. C., Explorations by, 71, 122
Grey, Explorations by, 122
Governor, 93, 191, 210, 222

Habitations, 386
Hamilton, Governor, 158
Hampden, Governor, 39
Hampton, Governor, 120
Hau-Hauism, 213, 216, 218
Hay, Area under Cultivation, 526
Average Yield, 527
Net Imports and Exports, 528
Production of, 527
Value of Crop, 502, 528
Hindmarsh, Captain, 90
Hobart, Annual and Capital Value, 627
Climate, 9
Rainfall, 9
Holdings, Area of, 473
Hone Heke, 189, 190, 191, 192
Honey, Value of Production, 498
Hongi, 168
Hong Kong, Trade with, 344
Hops, Value of Crop, 502
Horrocks, J. A., Explorations by, 97
Horses, Breeding of, 482
Number of, in each State, 483
Hospitals, 362
for Insane, 362
Hotham, Governor, 46
Howitt, Explorations by, 49
Hume and Hovell, 42
Hunter, Governor, 12
Hutt, Governor, 119

Illegitimacy, 377
Immigration, Assisted, 35, 254
Encouragement of to Queensland, 70, 75
Lecturers, 25
Importation of Capital, 727
Import Duties, Average Rate of, 357
Collections, 357
Import Duties, Revenue from, 773
Imports from British Empire, 338
Decline in Prices, 424
and Exports, 333 (see also Trade)
external to Commonwealth, 345
from Foreign Countries, 338
for Home Consumption, 356
Price-levels of, 423
Income, 735
Tax, Revenue from, 787
Incomes, Absentee, 727
Index of Mortality, 261
Insane, Treatment of, 362, 384
Insanity, 381
Causes of, 385
Rates, 383
Intercolonial Conference, 33, 49, 53
International Exhibition, Melbourne, 58
Victorian, 59
Intoxicants, Consumption of, 371
and Narcotics, Duties Collected, 355
Imports of, 355
Investment Companies, 747
Investments, Private, 729
Islands, Pacific, Trade with, 344
Iron, Discovery of, 572
Irwin, Lieutenant-Governor, 118

Jersey, Governor, 36
Jervois, Governor, 106, 224

Kanaka Labour, 79, 85
Kauri Gum, 221
Kelly Gang, 56
Kennedy, Edmond, Explorations by, 69
Kerosene, Import of, 587
Shale, 586

King George's Sound, Settlement at, 112
Governor, 13
Kintore, Governor, 107
Labour Members, 38
Party, The, 36
Lambing Flat Disturbance, 23
Lamington, Governor, 87
Land, Area alienated, 471
Area of Holdings, 473
leased, 471
Bills, Robertson's, 23, 25
Strangway's Act, 105
Conditional Leases, 274
Laws of New South Wales, 425
New Zealand, 465
Northern Territory, 456
Queensland, 445
South Australia, 450
Tasmania, 461
Victoria, 431
Western Australia, 457
Revenue, 788
Settlement, 425
Tax Revenue from, 787
Value of Private, 721
Land and Income Tax—
New South Wales, 779
Victoria, 780
South Australia, 781
Tasmania, 783
New Zealand, 784
Landsborough, Explorations by, 72
Lands, Public, Revenue from, 773
Lard Production, 498
Latrobe, Superintendent, 43
Launceston, Early Settlement at, 140
Lead, 576
Legislative Assembly (see Parliaments)
Council (see Parliaments)
Legislature, South Australia, 98
Leichhardt, Explorations by, 68, 69, 70
Search for, 71, 73
Libraries, Public, 411
Life Assurance, 757
Live Stock of Australasia, 474
Increase of, 475
Living, Cost of, 419
Loans, Character of Stock, 811
Conversion and Consolidation of, 813
Dates of Maturity, 802
Expenditure from, 821, 825
Expenses of Negotiation, 804
Interest on State and Municipal, 728
Late Issues of, 814
Local Bodies, 635
Redemption of, 801
Treasury Bills, 814, 821
Quotations for Stock, 807
Local Bodies, Finances, 634
Diseases, Deaths from, 283
Government, New South Wales, 616
Logan, Captain, 63
Commandant, Death of, 65
Lonsdale, Captain, 43

Macarthur and Woolgrowing, 13, 475
MacDonnell, Governor, 99
Macquarie, Governor, 15
Mahoetahi, Battle of, 210
Mail Services, 36
Maize, Area under Cultivation, 519
Average Yield, 519
Net Import and Export, 520
Production, 519
Value of Crop, 502, 520
World's production of, 521
Manawapou, Runanga at, 205
Manganese, 575
Manufactories, Classes of, 602–609
New South Wales, 599
New Zealand, 602
Plant employed, 610
South Australia, 601
Tasmania, 601
Value of Production, 610, 615
Victoria, 597
Western Australia, 601
Maori Runangas, 205
Maoris, Early Settlement by, 161
Ethnological Origin, 161
King Movement, 201, 203, 205, 206
Outrages by, 165, 170
Sale of Arms to, 207
Marriages, 288
Fertility of, 290
Mark Signatures, 410
Rates, 289
Marsden, Rev. Samuel, 166, 168
McKinlay, John, Voyages of, 104
McLean, Sir Donald, Native Policy of, 219
Measles, Deaths from, 270
Meat, Consumption of, 412
Preserved, Export of, 489, 492
Melbourne, Annual and Capital Value, 620
Incorporation of, 43
Rainfall, 7
Temperature, 7
Mercury, 577
Milk, Production of, 494
Military Forces, 310
Mineral Resources, 552
Minerals, Production of, 592
Value of Production, 593, 594

Ministries, New South Wales, 40
Queensland, 88
South Australia, 110
Tasmania, 159
Victoria, 61
Minor Crops, Area under, 543
Value of, 502
Mint, Gold received at, 755
Mitchell, Explorations by, 17, 42, 69
Money Orders, 765
Morton Bay *Courier*, 69
Free Settlement at, 68
Representation of, 68
Municipalities—
New South Wales—
Annual and Capital Value, 618
Area and Number, 618
Loans, 619
Receipts and Expenditure, 619
New Zealand—
Annual and Capital Value, 628
Loans, 628
Receipts and Expenditure, 628
Queensland—
Annual and Capital Value, 622
Loans, 623
Receipts and Expenditure, 622
South Australia—
Annual and Capital Value, 624
Loans, 624
Receipts and Expenditure, 624
Tasmania—
Annual and Capital Value, 627
Loans, 627
Receipts and Expenditure, 627
Victoria—
Annual and Capital Value, 621
Loans, 621
Receipts and Expenditure, 621
Western Australia—
Annual and Capital Value, 625
Loans, 626
Receipts and Expenditure, 625
Murray River, Navigation of, 97
Museums, 360
Musgrave, Governor, 83, 105
Mutton, Consumption of, 412
Frozen, Export of, 489, 492

Nantes-Bordelaise Company, 174
Natives, Outrages by, 67, 68, 71, 75, 95, 116, 141
Native Races, 290
Naturalisation, 293
Naval Defence, 312
Forces, 310
New Australia, 86
New Guinea—
Annexation of, 81, 82, 83, 88
Area and Boundaries, 2
Gold Discovery, 81
New South Wales, Area, 1
Boundaries, 2
Climate of, 6
Corps, 13
Proclamation of, 12
Rainfall of, 7
Newspapers and Letters, 359
New Zealand, 160
Area and Boundaries, 3
Association, 169, 173
Climate, 9
Coastal Defence of, 225
Early Constitution Disputes, 200
Land Disputes, 184, 201
Policy, 207
Troubles, 176, 180
Missionaries, 166
Settlements, 186
Trade, 166
Traditions, 160
Establishment of Legislature, 185
Flour and Sugar Policy, 204
French Colonisation, 181
Granting of Constitution, 196, 199
Grey's Military Colony, 194
Labour Legislation, 230
Party, 228
Land Company, 177, 182, 187, 196
Land Disputes, 176
Legislation of, 225
Legislative Council, 230
Ministries, 232
Old Age Pensions Act, 232
Prohibition Principle, 227
Public Lands Administration, 226
Rainfall, 10
Retrenchment Policy, 225
Seddon Administration, 229
Nickel, 578
Norfolk Island, Convict Settlement at, 146
Removal of Settlement, 140
Normanby, Marquis of, 55, 80
Northern Territory, Annexation, 103
Climate, 8
"Nor'-west," Colonists of the, 123

Oatmeal, Consumption of, 412
Oats, Area under Cultivation, 516
Average yield, 517
Net Import and Export, 518
Production of, 516
Production in Chief Countries, 517
Value of Crop, 502

Oats—
World's Production, 518
Ocean Mail Services, 708
Old Age Pensions, 737
Onslow, Governor, 227
Opal, 80, 590
Orakau, Battle of, 212
Orchards and Gardens, Value of Production, 502
Ord, Governor, 127
Otago, Gold Discovery at, 220
Oxley, Discoveries by, 62

Paraguay, Settlement in, 86
Parasitic Diseases, Deaths from, 279
Parks, 360
Parliament, First, 31
Parliaments, 233
New South Wales, 234
New Zealand, 237
Queensland, 73, 237
South Australia, 236
Tasmania, 235
Victoria, 235
West Australia, 238
Parihaka, Maori Settlement at, 223
Pastoral and Dairy Production, Value, 499
Produce, Exports of, 353
Production, Value of, 485
Products, Price-levels of, 500
Resources, 474
Peace Preservation Bill, 87
Pearl-shell, Western Australia, 123
Pensions, Old Age, 737
Perth, Annual and Capital Value, 625
Temperature, 9
Petrie, Andrew, Explorations of, 66
Philip, Governor, 11, 12
Phthisis, Deaths from, 280
Pinjarrah, Battle of, 116
Platinum, 576
Police, Cost and Strength of Force, 371, 372
Population, 249
Ages of the People, 255
Agricultural, 506
Alien Races, 291
of Australasian Cities, 296
Births, 257
Birthplaces, 297
Breadwinners and Dependents, 596
Census Periods, 250
Centralisation of, 294
Commonwealth, 251
Conjugal Condition, 290
Deaths, 258
Density of, 252

Population—
Effects of Gold Discovery, 253
Estimates by Statisticians, 251
Growth of, 249, 250, 251
Increase by Immigration, 254
Index of Mortality, 261
Native Races, 290
Sickness and Infirmity, 300
Various Colonies, 249
Various Countries, 252
Pork, Consumption of, 412
Salt, Production, 498
Port, Albany, 75
Curtis, Settlement at, 69
Phillip, Colonisation of, 42
Separation of, 19, 43
Portland Bay, 42
Postal Notes, 766
Posts and Telegraphs, 702
Cable Services, 714
Expenditure, 790
Growth of Postal Business, 704
Money Orders and Postal Notes, 707
Ocean Mail Services, 708
Parcels Posts, 707
Postal Facilities, 708
Postage Rates, 706
Registered Letters, 706
Revenue and Expenditure, 718
from, 773
Telegraphs, 711
Telephones, 717
Potatoes, Area under Cultivation, 524
Average Yield of, 525
Consumption of, 412
Net Import and Export 525
Production of, 524
Value of Crop, 502, 526
Poultry, Value of Production, 498
Price-levels, 421
of Pastoral Products, 500
Private Finance, 720
Schools, 400
Privy Council, Appointment to, 109
Probate Returns, 724
Probate and Succession Duties, New South Wales, 775, 778
Production, Pastoral, Value of, 485
Prohibition Principle, New Zealand, 227
Property, Distribution of, 722
Value of, 721
Public Debt, 797, 801
Interest and Charges, 790, 791
Finance, 769
Instruction Act of 1880, 33
Expenditure, 790
Service Act, Victoria, 58

Queensland, 62
Area, 1
Boundaries, 2
Islands, 2.
First Legislative Assembly, 74
Proclamation of, 73
Rainfall, 8
Separation of, 24
League, 84
Quetta, Wreck of, 84

Railway Disputes, Tasmania, 156
Railways, 21
Accidents on, 657
Average Weight of Train, 655
Coaching and Goods Traffic, 654
Comparison of Facilities, 645
Cost of Construction, 647
Diversity of Gauge, 644
Earnings and Expenses, 652
Extension of Construction, 641
Financial Results of Foreign Lines, 653
Foreign Lines, 646
History of Construction, 636
Interest returned on Capital, 650
Land Grant, 131
Mileage in course of Construction, 642
Mileage open, 638
New South Wales, History of, 658
New Zealand, History of, 695
Northern Territory, History of, 683
Private, 641
Queensland, History of, 671
Revenue and Working Expenses, 648
Rolling Stock, 657
South Australia, 98, 107, 677
State Control of, 643
Sydney and Brisbane, 84
to Melbourne, 33
Tasmanian, History of, 691
Tasmanian Main Line Company, 158
and Tramways, Expenditure, 790
Revenue from, 773
Victorian, 68
History of, 666
West Australia, 121, 129
Australian, History of, 686
Rainfall Area of Australasia, 10
Raisins, Production of, 531
Ranfurly, Governor, 231
Rangihaeata, Rebellion of, 193
Rangiriri, Battle of, 212
Re-exports, 350
Registration of Vessels, 331
Religion, 302
Denominations in 1899, 307
at Census, 306
State-aid to, 305
Responsible Government in New South Wales, 21
Tasmania, 152
West Australia, 132, 136
Victoria, 48
Revenue Accounts, Position of, 793
Customs, 354
and Expenditure, Adjustments of 792
Public, 770, 772
Sources of, 773
Rice, Consumption of, 412
Robe, Governor, 96
Robinson, W. C. F., Governor, 30, 107, 127, 129, 224
Ruapeka-peka, Attack on, 192
Rum Trade, 13
Russian Invasion, Fears of, 99

Salt, Consumption of, 412
Rock, 588
Savings Banks, 748, 752
Scarlet Fever, Deaths from, 271
Schools, State, 392
Average Attendance of, 395
Enrolment at, 394
Expenditure on, 396
Private, 400
Teachers employed, 392
Selwyn, Bishop, 185
Sentry Hill, Battle of, 214
Settlement, Australasian, 471
Sheep Breeding, History of, 475
Decrease and Increase of, 478
Introduction to Tasmania, 142
Merino, Introduction of, 476
Number in each State, 477
Slaughtering Returns, 479
Value of Flocks, 479
Shipping, 318
at various Ports, 329
Entered and Cleared, 318
External, 322
Intercolonial, 320
Nationality of Vessels, 326
of Principal Countries, 324
of United Kingdom, 330
Registration of Vessels, 331
Steam and Sailing Vessels, 327
Sickness and Infirmity, 300
Silver, Broken Hill Proprietary Company, 561
Coinage of, 756
Discovery of, 560

Silver—
Quantity and Value raised, 562, 564
World's Production of, 564
Social Condition, 359
Sorell, Governor, 142
Soudan Contingent, Despatch of, 32
South Australia, 89
Areas and Boundaries, 3
Climate, 8
Early Disputes, 91
Finances of, 92, 94
South Australian Association, 89
Company, 89
Sown Grasses, Area under, 529
Spirits, Consumption of, 417, 418
Stamp Duties, Revenue from, 787
State Advances, 545
Bank, South Australia, 108
Strahan, Governor, 158
Stirling, Lieut.-Governor, 118
Stock, Carrying capacity, 483
Live, 474
Stockdale, Explorations by, 129
Strangway's Act, 105
Strikes, 35, 87
Strzelecki, Count, 43
Stones and Clays, 588
Stuart, McDouall, Explorations by, 102
Sturt, Captain, 17, 96
Sugar-beet, 536
Sugar-cane, Area under, 534
Production of, 534
Value of Crop, 502, 536
Sugar, Consumption of, 412, 535
Manufacture of, 535
Net import of, 535
Industry, Queensland, 78
Suicide, 375
Sulphur, 578
Swan River, Land Grants at, 113
Settlement at, 113
Swine, Number in each State, 497
Sydney, Annual and Capital Value, 617
Climate of, 6
Observatory, 22

Tamati Waka Nene, 192
Taranaki War, 209, 213
Tariff Conference, 28
Tasmania, Area and Boundaries, 3
Climate, 9
Early Settlement at, 138
Historical Sketch of, 138
Legislative Council of, 149
Legislature of, 145
Naming of, 151
Rainfall, 9
Separation of, 143
Tasman's Discoveries, 161
Tawell Case, 23
Tawhiao, Policy of, 224
Taxation, Direct Revenue from, 774
Indirect Revenue from, 774
Revenue from, 773
Tea, Consumption of, 412
Technical Education, 33, 406
Te Kooti, 215, 218
Te Ruaparaha, 171, 193
Telegraphs, 711
Adelaide to Perth, 106
South Australia, 101
Transcontinental, 105
Telephones, 717
Tellurium, 576
Tennyson, Governor, 109
Te Whiti, 223
Thursday Island, Settlement at, 82
Tin, Discovery of, 569
Deposits, Queensland, 80
Production of, 572
Titanium, 577
Titokowaru, Rebellion of, 215
Tobacco, Cultivation of, 538
Consumption of, 416
Leaf, 416
Imports of, 540
Production of, 539
Value of Crop, 502
Tonnage in Ballast, 325
Torrens Act, 101
Trade of Australasia, 332, 334
Trade, Extra-Australasian, 336, 346
Frozen Meat, 488
Growth of, 346
Imports and Exports, 333
Intercolonial, 335
Merchandise and Specie, 347
with British Possessions, 337
Foreign Countries, 337, 341
United Kingdom, 337, 340
Transportation, Abolition of, 18
Cessation of, 121
Western Australia, 119
Transvaal, Australasian Contingents to, 311
Treason Felony Act, 29
Treasury Bills, 814, 821
Triennial Parliaments, 30, 31
Truganini, Death of, 157
Trust Funds, 796
Typhoid, Deaths from, 278

Van Diemen's Land Company, 144
Vessels, Foreign Trading, 343
Victoria, 41
Area, 1

Victoria—
Boundaries, 2
Climate, 7
Proclamation of Colony, 44
Rainfall, 7
Violence, Deaths from, 287
Vital Statistics, 249 (see Population)
Vogel, Sir Julius, Policy of, 216

Wakefield, Edward Gibbon, 90
Wakefield's Land Purchases, 177
Wairau Massacre, 185
Waitara Land Purchase, 208, 211
Waitangi, Treaty of, 179, 183
Water Supply of Sydney, 34
Waterworks, Happy Valley, 108
Wealth, Private, 720
Weld, Governor, 121, 157
Wellington, 214
Annual and Capital Value, 628
Early Settlement, 178
Rainfall of, 10
Western Australia, 111
Area and Boundaries, 3
Climate, 9
Discovery of Gold, 133, 135
Early Discoveries, 111
Government of, 117, 132, 136
Land Grants, 113
Mineral Discoveries, 130
Immigration to, 114
Free Grant System, 118
Rainfall, 9
Western Australia—
Transportation to, 119
Wereroa "Pa," 215
Wheat, Average Yield, 512, 513
Area under, 509
Consumption of, 412, 514
London Prices, 515
Net Imports and Exports, 515
Production of, 510
Value of Crop, 502, 513
World's Production of, 511
Whooping Cough, Deaths from, 272
Wine, Consumption of, 417, 418
Export of, 532
Production of, 531
Wolfram, 577
Wool Clip, Weight per Sheep, 486
Exports of, 487
Growing, History of, 475
Initiation of, 13
Production of each State, 486
Prices of, in London, 488
Production, Value of, 485
Sales, 352
Trade, 350
Wynyard, Lieutenant-Colonel, 198

Young, Governor, 24, 97, 151

Zinc, 577
Zymotic Diseases, Deaths from, 269

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